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A CLINICAL LEOTURE.

Delivered at the Vienna General Hospital.

BY PROFESSOR NOTHNAGEL.

Glandular Atrophy of the Stomach.

Gentlemen: The patient, a locksmith, 48 years old, on May 19, 1890, presented himself at the clinic. Parents and brothers and sisters living and well. During childhood the patient has not been ill, and for the past thirty-three years has resided in Vienna. About six years ago he suffered from some lung affection, which lasted eight weeks. There was, during the attack, cough and moderate mucous expectoration. In 1889 he suffered from disease of the right eye, since when his vision has been impaired. For five years he has been suffering from loss of appetite and debility, which, however, did not cause him to give up work until 1889. Since September, of that year, he has lost flesh rapidly, had night sweats, and frequent nausea and vomiting. He generally remained in bed. There was loss of appetite; food, especially meat, became loathsome to him. Since February, 1890, he vomited a bitter fluid a few times each week. The cough abated, but the night sweats increased. Hemorrhages nor edema have never occurred. He has generally been slightly constipated, but with painless stools. He denies having had syphilis or drinking to excess.

We have here the history of a patient who is suffering from a steadily-increasing anorexia. During the first four years he gradually lost his appetite without any other symptoms; there was no nausea or eructations; no vomiting or pain. Towards the end of the last, and the commencement of this, year he began for the first time to vomit. Since his admission he has only vomited twice. He states that he has lost much flesh. In considering the history we first think of a neoplasm. The patient looks tired, weak and suffering, but is without pain. His face is excessively thin, the zygomotic and malar bones are prominent. The fat even in the fossa canina has disappeared. The complexion is sallow and cachetic, the lips and the mucous membranes are pale, the conjunctiva somewhat injected. Icterus is not present. His body is thin, the fat covering the bones has everywhere disappeared. The skin is shrunken, harsh and rough. The muscular tissue has atrophied. In spite of the extreme degree of cachexia, there is but slight edema of the lower extremities. The pulse is 64. The radial pulse is soft and fairly well filled. the impulse is comparatively high, the tension a little above the normal. The arms and hands are pale. The temperature to the touch is not increased. At present we have a subnormal temperature. The temperature chart shows we have an irregular fever course. The tongue is pale red, moist, and markedly coated. During his stay in the hospital he has once had diarrhea; lately there has been a regular daily movement. Now, the question arises, whence come the temperature changes, the cachexia, the complete loss of appetite, for the patient takes little but fluid nourishment.

We turn now with interest to the abdominal examination. The abdomen is greatly contracted; below the border of the thorax is a marked depression, as is seen in meningitis or cholera. Some lymphatic glands are enlarged; in the neck these are not found. The abdomen is soft, and not tender to pressure nor painful. No tumor can be made out, and nothing abnormal can be felt. Percussion reveals a normal condition. The spleen on palpation seems slightly enlarged. An examination of the lungs shows them to be normal. Ausculation of the heart gives feeble but pure sounds. The urine is yellow and slightly cloudy; it contains no albumin, but gives a strong indican reaction. The fundus of the eyes is normal. An examination of the blood shows the corpuscles arranged in rouleaux with many white cells in the field, but not so numerous as in leukemia. Indistinct poikilocytes and makrocytes. The blood corpuscles were counted twice. The first time the ratio of white to red was 1:125, and on the second 1:116. The hemoglobin they contained was 40. We have, then, an indistinct oligocytosis, oligochromemia, as well as leucocytosis; a distinct macrocytosis and microcytosis were wanting. It was demonstrated at one examination that in two or three white blood cells pigmented bodies were found. This agrees with the malarial spleen, but where the malaria was acquired does not appear. That is the result of the examination of the patient.

Collecting the symptoms together, we have a man of 48 years before us, who, 4 or 5 years previously, lost his appetite, who had never complained of pain in the region of the stomach, who had never vomited blood, and who had vomited only a few times. There is nothing abnormal in the urine. All other organs are normal. The blood shows only the appearance of anemia. We find, in short, an excessive emaciation, otherwise there is nothing to be found. There is still a question—what is the significance of the stomach contents? The vomited matter (patient had vomited twice, 2 and 5 hours respectively after meals), was examined, it consisted of about half a pint of sour fluid, mixed with undigested but well masticated filaments of meat. Chemical examination showed the absence of free muriatic acid. Under the microscope no ferment cells, no sarcinæ were found. A still later examination showed a deficiency of free muriatic acid, but a considerable quantity of lactic acid. Now, gentlemen, we cannot proceed further with the examination; we have already examined every part that can be examined. I therefore arrive at the diagnosis of glandular atrophy of the stomach. The diagnosis is extremely difficult.

We will now proceed to review each symptom. We have in our patient to deal with a high degree of anemic atrophy, and there is scarcely any doubt that from the absence of any discovery elsewhere, the seat of all the trouble is the stomach. The symptoms from the first appearance of the disease are referred to the stomach. The patient had lost his appetite and I direct your attention to that being the only symptom during several years. We thought, immediately upon seeing the man, of a neoplasm, and the question arises, does one exist? I believe it is not present; of course we have here one symptom which of late years must be considered of great weight with regard to carcinoma. The vomited matter in cases of carcinoma shows a deficiency of free hydrochloric acid, as has been proved by a series of investigations, by Vanderfeld, Kuhn, Klemperer, and others. This deficiency of free muriatic acid has elicited a lively discussion, and the belief was that it may depend on a specific effect of the carcinomatous diathesis on the production of free muriatic acid. From the first announcement of this fact, I had my own explanation, but did not publish it, which I see to-day generally accepted, viz: that an entirely secondary factor is producing this deficiency. Fendig found, in some varieties of carcinoma, the peptic glands shrinking, becoming atrophic. This may also take place in cirrhosis of the pylorus, and it is self-evident that when the principal glands disappear, free muriatic acid will be absent. Even Ewald accepted this explanation. This was, and with justice, considered a very important factor. I wish, however, to call your attention to a second reason. The deficiency of free hydrochloric acid does not determine the diagnosis of carcinoma, we encounter it in some other conditions and *vice versa*. There are special cases of carcinoma where acid is present in the vomit. Therefore the diagnosis of carcinoma cannot be unconditionally rejected, if free acid has been detected. The question arises, whether we have other data indicating carcinoma? We have none. We cannot detect a palpable tumor nor can we find a consecutive dilatation of the stomach, which must be the case after a duration of three to five years; further, the absence of pains, and for years the complete absence of vomiting, are against carcinoma. There are cases of carcinoma, indeed, in which vomiting does not occur. I have seen such cases in which two-thirds of the stomach was ulcerated, and vomiting did not take place till a few hours before death. In this connection we have to consider that the illness commenced over 4 years ago, which is of importance, when we remember that the fatal determination of carcinoma scarcely takes 3 years. All these facts taken together do not support the diagnosis of carcinoma. I have already stated that in other organs nothing is discoverable, which can explain the cachexia and great loss of flesh. Malarial disease would be suggested from the enlargement of the spleen, but I have never seen a case in which there were such light changes in the spleen and in the blood. We can, therefore, with justice, leave this out of our consideration.

There remains only one other gastric affection to be considered, to which I have already referred as atrophy of the stomach. This condition has only recently been recognized. We include, under this head, various anatomical changes. There is one form of atrophy which affects the peptic glands, by which these important elements in the function of the stomach disappear. This form is not infrequently associated with cirrhosis of the stomach, a hyperplasia of the tissues of the stomach walls affecting the whole organ. This variety was formerly often regarded as carcinoma, and it was Brucks, a clinician long since passed away, who showed that it was not carcinoma but hyperplasia. This hyperplasia of the coats of the stomach thickens its walls. I have observed it only during life. Where it has been found *post-mortem*, the stomach walls were as thick as my finger and the capacity of the organ was greatly reduced. This patient was a youth who was seen in 1876 or 1877. The case was particularly noticeable on account of the etiology. The loss of appetite and frequent vomiting, was caused, as he persistently stated, by the disgust resulting from eating a dog's head, for a wager. Since that time he had been subject to these peptic disturbances. This form of cirrhosis results from the excessive growth of the connective tissue, from the pressure of which the peptic glands completely disappear. On making a section with the knife, we find dense, hard tissue, which under the microscope is seen to consist entirely of connective tissue, but the glandular elements of the stomach was absent.

I wish to direct your attention to a second variety of atrophy of the stomach. It is described by Fendig, and is associated with anemia, cachexia and symptoms of dyspepsia, and in many cases is diagnosed as nervous dyspesia or carcinoma. In this form the stomach walls become very thin and as transparent as a sheet of paper. The muscular and serous layers are present, but the mucosa is absent. This also results in atrophy of the peptic glands. In this variety also, no etiological factor can be discovered.

There is another form of atrophy of the stomach recently described by Ewald which occurs most frequently of all—atrophy following gastric catarrh. I have been aware of its existence for a number of years, and from many examinations am satisfied that as a sequel of a catarrh of the intestines atrophy can take place, in which the glands of Lieberkühn disappear, and this is also true of the stomach. Cases of chronic gastric catarrh frequently result in an hypertrophy of the connective tissue, by which the glands are compressed and caused to atrophy, or a cystic condition of the coats of the stomach may be produced. In this way secondary atrophy follows gastric catarrh.

If we group them together we have, anatomically, four different varieties: (1) Atrophy arising from carcinoma of the stomach. (2) Atrophy following gastric catarrh. (3) That form described by Fendig with thinning of the stomach walls. (4) Atrophy from hyperplasia of the walls of the stomach.

You comprehend the importance of the deciding symptom, the absence of free hydrochloric acid, upon which we principally make the diagnosis. As there is no indication of carcinoma, we are able, from the absence of free hydrochloric acid in this indirect manner, to diagnose gastric atrophy.

There still remains the question with which form of atrophy we have to deal. I must here state that this case is not one resulting from gastric catarrh. It is quite different from that variety. In the latter we have tasteless or sour eructations, frequently, coated tongue, oppression after eating, and a gradual loss of appetite. The sour eructations, of which our patient complains, should not mislead us; they arise from lactic and not hydrochloric acid, the patient taking only milk, and food prepared with milk. All the indications of secondary atrophy after gastric catarrh are wanting. We thus arrive at primary atrophy, either the hyperplastic form, or that from thinning of the walls.

The question now arises whether we can go further. That is very difficult. The impaired functions give no other symptoms, and by palpation nothing can be discovered. In case of cirrhosis of the stomach, with thickening of its walls, there is usually diminished capacity, and upon this lessened capacity of the stomach much importance rests. If the patient, as in our case, can eat a moderate quantity of food, and does not vomit, it contraindicates the hyperplastic form. That is another step in our diagnosis.

It is somewhat doubtful whether the diagnosis is fully proven; but I know of no better one to propose. If the diagnosis is correct, the prognosis is grave. As therapeutic agents we will give hydrochloric acid and pepsin; we will also give our patient more farinaceous food. For we should not forget that the condition of the intestines is of great importance. It should be our object to give this in the most digestible form, as custards, crackers, etc. The hydrochloric acid will be given in 4, 5 or 6-drop doses, immediately after meals. In nourishing this patient we may also employ enemas of partially peptonized food. Enemas of milk, soup, eggs, etc., are not absorbed by the large intestine. The proper nourishment of the patient is a most important point. The question of surgical interference, by resection of the stomach arises, but if we are positive of our diagnosis this course would be inadmissable.

TUBERCULOSIS OF CERVICAL LYMPHATIC GLANDS, WITH AN ILLUSTRATIVE CASE.

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The course of the lymph stream is from the periphery towards the centre, and as a consequence, any deleterious matters entering it and floating in the current will tend to be carried to the depths of the body out of reach of surgical interference. If, however, the surgeon can stand in the way and prevent the poison thrown into the stream from passing beyond the superficial lymphatics, he fulfills one of the highest efforts of his calling, prophylaxis. This was the aim of those who proposed ligation and extirpation of the lymphatics in syphilis ; but the diffusibility of the poison in this case rendered the operation fruitless. On the other hand, there is every reason to think the same principle has been productive of much good in operations for the cure of cancer.

The germ causing tuberculosis is not rapidly diffusible, except when thrown in large numbers into the blood current, and so distributed suddenly to all parts of the body. Usually this virus first enters the spaces between the fibres of connective tissue, which are the radicles of the lymphatics; from there it floats into the larger lymph channels, and so reaches the nearest lymphatic gland. If the lymphatic system be functionating properly, the germ may be passed on and finally make its exit through one of the emunctories without doing any more damage than a foreign body passing through the alimentary canal. The tubercle bacillus is a slow grower, even under very favorable conditions, and is hurried along in the rapid lymph stream before it has time to propagate and form a colony. Furthermore, it requires a suitable soil on which to grow. The lymphatic glands of children seem to be particularly vulnerable, and we find that the glands of the neck are very frequently the seat of disease, as evidenced by the old name "scrofula" (*scrofa*, a sow), from the thickened and brawny appearance of the neck, caused by the enlargement and inflammation of the lymphatic glands.

In looking for the portal through which the poison gains access to these glands, we naturally think of the mouth. The gums and anterior part of the oral cavity are subject to severe irritation during teething, giving rise to small ulcerations and other solutions of continuity of the delicate mucous membrane; and the posterior part has on each side the soft and patulous tonsils, rich in lymphatics and prone to inflammation. These considerations were of great weight in determining the line of action in the case of a child who had been exposed to tubercular infection from one of its parents, and developed an enlarged cervical gland without any other known cause, such as measles or syphilis, to account for it. The history is as follows:

Toward the latter part of August, 1889, May E——, aged 4 years, developed a rounded, smooth, easily-movable tumor, about the size of a pigeon egg, under the left sterno-cleido-mastoid muscle. The child was fretful, but otherwise in good health, without any rise of pulse or temperature. There were no indications of pulmonary trouble. Her father had died of consumption the year before.

The immediate extirpation of the gland was proposed and carried out on Sept. 19th. One striking peculiarity in these operations is, that what appears to be quite a superficial swelling will be found situated much deeper than expected. After incising the skin, the finger had to be repeatedly inserted into the wound to make sure of the position of the tumor, and the gland that seemed so superficial was picked off the transverse processes of the cervical vertebræ.

The gland, when removed, was reddened and soft, but not at all cheesy. Some of the juice and detritus squeezed and scraped from its cut surface, was put on slides, dried, and stained in the usual way for tubercle bacilli. Out of a large number of slides so prepared, only two or three were found to contain the bacillus, and then in very small numbers, but enough to fix the diagnosis. Transverse sections of the gland did not show the histological changes characteristic of tuberculosis, but only those of a diffuse, rather acute inflammatory process. Tubercular infection does not necessarily give rise, at so early a stage, to the formation of tubercles with their giant, endothelial, and lymphoid cells, and the caseous process is a still later event than the formation of tubercles. The tuberculous process gives rise at first to nodules composed of round cells, but in many instances it is impossible to distinguish these little aggregations of cells from the surrounding lymphatic tissue.[1] No tubercle bacilli were found in the sections.

It will be observed that this method of treating tuberculous adenitis in children, approaches in radicalness the treatment of malignant disease, and indeed the course of the malady justifies this rigor. The disease is destructive in the gland where it takes up its abode, leading to its structural and functional annihilation, and the formation of a cheesy mass. It has been asserted that such a mass may gradually break down into a finely granular detritus and be absorbed, and if the virus have died out beforehand, this must be looked upon as the most fortunate outcome possible. But in our opinion this happy issue is of very doubtful occurrence. The best we may expect is an investment of the dead and diseased mass with a fibrous capsule, and the deposition in it of lime salts causing calcification. This fortunate event rarely happens, for in children suppurative processes are easily set up, and indeed suppuration is one means of cure here, for the whole dead infective mass may be extruded through a fistula. But how long will such a process take? And will not the child suffer in its general health during the process? What ugly deformed scars will be left in the neck? are questions full of meaning to those who adopt the expectative line of treatment. Suppuration and the extrusion of the diseased mass is therefore the next best thing to encapsulation and calcification when Nature is left to treat the disease.

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[1] Zeigler, Pathological Anatomy and Histogenesis, page 173.

Besides being infective in its immediate neighborhood by direct continuity, it must not be lost sight of that it has yet another characteristic of malignancy, that is the spread of the infection from the gland first implicated to the next one farther down the lymph stream, and so on till the internal organs are reached, when in a pathological way, there is a vista of ugly deformities which few of us care to look down. So we see that although there may be a happy issue to the disease without operative procedures, still the chances are so far against it that those surgeons who believe in treating tuberculosis as a malignant disease, receive, as far as the morbid processes in the glands of the neck are concerned, very positive support.

On leaving the city, a few weeks after the operation, the child was quite well, and had a small linear scar on the side of the neck for the wound had healed kindly without accident. When last heard from, Aug. 5, 1890, she was not very robust, and the neck at the site of operation was somewhat painful when touched. No indications of tuberculosis, however, were present, and it is to be hoped that the child has escaped that danger.

THE PATHOLOGY OF THE OSSEOUS STRUCTURE OF THE TEETH IN PREGNANCY.

By A. F. McLain, M. D., D. D. S., Santa Rosa, Cal.

Read before the Sonoma County Medical Society.

The great loss of the teeth in females, as influenced by pregnancy, is too common an occurrence to have escaped the observation of the medical or dental practitioner. Notwithstanding advances in our knowledge, every effort made toward the preservation of these valuable—necessary—appendages in that condition, has resulted in utter and humiliating failure.

The local symptoms usually attending the period of gestation may vary in different cases as regards the quantity of the salivary and mucous secretions; but a strong acid reaction is found to be an invariable accompaniment of the disorder. This is manifested in acute sensibility about the necks of the teeth, followed by erosions near the margin of the gums, softening of the enamel, and ultimately by the rapid disintegration of the dentine. These pathological phenomena are frequently seen in other conditions than that referred to, being often met with in young persons of either sex, and especially in individuals of dyspeptic habits, or in those addicted to the use of mineral or strong vegetable acids. Still, the almost universality of their occurrence during gestation, and the disappearance of the general symptoms when that period has been passed, indicates, pretty clearly, that the disorder owes much of its virulence to symptomatic causes. The extent of the local lesions in any case is governed very much by the structural quality of the teeth and by hereditary predisposition; hence, it may naturally be deduced that the least appreciable abnormal changes occur in those cases where dense, perfect dental organisms exist, in conjunction with perfect, general health, whereby those depressing influences which tend to weaken the resisting capacity of the organisms are obviated. The sympathetic influences which a gravid uterus exerts upon the stomach in producing disordered gastric secretions being an established fact, it is readily seen how, upon the oral fluids becoming vitiated through chemical reactions and nervous relations of organs, conjoined to predisposing causes, the destructive processes become greatly accelerated by the augmented solvent properties of such products.

Of predisposing causes—debilitating influences, heredity, temperament, etc., have been classed by pathologists as the most efficient. How far temperament conduces to abnormal functions aside from the control it has in influencing the quality of the textures, is not positive. But we do know, that in certain temperaments, the nervous, for instance, irritability of the excitor system exists to a high degree, and that this natural nervous irritability as modified by certain temperaments and manifested through the sympathetic system, is susceptible under the play of mental emotions of so altering or perverting the normal constituents of the secretions as to render them positively toxic. The pernicious effects of nourishing infants from the breast when the mothers are laboring under great mental excitement, are too well established to render it necessary to cite authorities in proof of the fact Again: in erosion of the enamel, the microscope having failed to reveal capillaries, whereby the sanguineous fluids might be transmitted, or, the presence of nerves—the process cannot be attributed to interstitial absorption, as neither nutrition, nor destructive assimilation obtain in the enamel.

The cause of the rapid dissolution of the teeth during gestation has generally been ascribed to defective nutrition, in that the food lacking in the elements of ossific matter, the osseous system of the new organism in process of building, makes demands which can be supplied only by the osseous system of the mother. On the other hand, it is urged against this hypothesis, that two women placed under similar circumstances, having similar temperaments, being fed at the same table, and partaking of the same food, will present conditions diametrically opposite, the one being in robust health, comparatively free from the usual sympathetic disturbances, whilst the other will exhibit all the symptoms described, in their most aggravated forms. The fact is that human knowledge on this subject is limited, or in other words, is hypothetical. That the offspring *in utero* actually preys upon the bony textures of the parent for those earthy constituents necessary for its own structure, is not sufficiently proven to justify the unreserved acceptance of the theory. Neither is it to be assumed that with the seemingly contradictory symptoms presented in the instances cited, an absorptive process existing in one case and not in the other, the dissimilarity was due to a difference in the sympathetic relations of the organs. The rational deduction to be drawn from these facts, is that the assimilative functions and vital forces in one case were superior to those of the other. The one being unable to appropriate sufficient of the earthy principles from her food to supply her own wants and those of the new being, her vital forces were impaired, whilst at the same time the sympathetic influences operating from the pregnant state so vitiated the gastric and oral secretions as to induce chemical reactions, which in connection with other exciting causes induced the lesions presented.

Having attempted to show that the pathological phenomena in this condition are due to physico-vital causes, the obvious treatment consists in employing every hygienic means best calculated to build up the system, and control waste, as generous, wholesome diet, fresh air, exercise, mild tonics and the exhibition of nervous sedatives when their use is indicated. Above all, the assimilative functions are to be encouraged by the administration of nutritive stimulants, of which nothing has given more satisfactory results than the soluble phosphate of lime preparations, the hypophosphites, and particularly the lacto-phospate in small doses, from 1 to 3 grains in solution, at each meal. The syrup of the lacto-phospate is the most eligible form, except in the case of infants, when the powdered lacto-phosphate may be dissolved in the milk. Not unfrequently the most urgent dental tenderness and odontalgic symptoms with a tendency to decalcification of the teeth in pregnant women will entirely subside after the exhibition of this drug for a few days.

This treatment commends itself as much for the beneficial effects derived by the mother, as for the power it possesses of imparting to the child good dental structures. It is especially indicated if an hereditary predisposition to bad teeth exists in the mother, and should be carried out with the view, not only of improving the structural quality of the teeth of the child, but also to mitigate the ills which are so common to the period of teething, a virtue this remedy possesses to an eminent degree, as I have had occasion to witness.

In the case of an infant its administration should begin early after birth, by dissolving the lacto-phosphate in the milk given from the bottle, and be continued in the ordinary food for a year or more after the first dentition shall have been completed. And where bad teeth are inherited, it would be well to continue it until second dentition has been well advanced. Minimum doses are preferable, as when larger quanties are given, a waste of the medicine is incurred, in consequence of the system not appropriating more than a certain amount. Two grains, two or three times a day are therefore sufficient for practical purposes.

In the case of pregnant women, local treatment should not, in the meantime, be neglected. To this end, the mouth should be rinsed with diluted lime water or a solution of bi-carbonate of soda three or four times a day, and at night, just before retiring to rest, packing precipitated chalk about the necks of the teeth, for the purpose of neutralizing the acids that are so apt to accumulate at the margin of the gums. In the odontalgic pains of pregnancy, I have had occasion to administer the syrup of the lacto-phosphate of lime, and have found it, in many instances, to act very beneficially—not only in relieving the symptoms, but frequently in curing them entirely.

SOME SUGGESTIONS REGARDING THE TREATMENT OF TYPHOID FEVER.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Co's Hospital, Sacramento, Cal.

I propose to refer briefly to what I regard as important factors in the treatment of typhoid fever patients. These views seem to have been verified by a brief experience in the management of this disease in the wards of the Southern Pacific Company Employes' Hospital in this city.

No effort will be made to review the volumnious literature bearing upon the subject. For many years the mortality prevailing among typhoid cases in this institution has been so large as to affect materially the general death rate. This statement, however, is measurably accounted for by the class of cases treated, by their surroundings during the onset of the disease, and by the fact that many of them were of necessity transported long distances before their admission to our wards. In not a few instances patients have been found in a moribund condition at time of arrival. These statements are in no sense apologetic, but are essential to a correct estimate of the few statistics which will be presented hereafter.

The means employed in the management of typhoid cases in this institution are comprised under five general heads: (1) Ventilation. (2) Cleanliness. (3) Dietary. (4) Refrigerant. (5) Antisepsis.

Ventilation.—Nurses and attendants are specifically instructed, that the greatest amount of fresh air should be accorded the patient, which is compatible with safety.

Cleanliness.—That the patient should be subjected to a sponge bath at least once daily, and that the bed linen should be changed once daily, or more often when circumstances require it. The bath is administered with special reference to cleanliness and the condition of the skin, rather than to its antipyretic effect. This double condition, an abundance of fresh air and scrupulous cleanliness on the part of the patient and his surroundings, having been fulfilled, very much has been accomplished in the interest of his comfort and safety.

Dietary.—The main article of diet is peptonized milk; that is, milk treated according to the method prescribed by Fairchild, the latter's peptogenic powder being the agent employed. The average patient will consume about a half pint of this preparation every three hours during the day or night. For the sake of variety a small amount of beef-tea is occasionally substituted. Alcoholic stimulants are also resorted to as occasion requires. Such a course can be safely pursued for a period of from three to five weeks without discomfort on the part of the patient.

Refrigerant.—As a refrigerant measure the ice-collar or the ice-collar and ice-cap combined, have been found both an agreeable and efficient agent. Temperature can be rapidly and safely reduced by this means from two to four degrees, in a comparatively short time. Patients express themselves as delighted with its effects. By it they secure refreshing sleep after a period of active delirium, and escape the feeling of oppression and exhaustion which have often been observed after the exhibition of the specific antipyretics.

Antisepsis.—The long list of drugs which have found ardent advocates among the profession as being specially adapted to the exigencies of this disease, have been in the main discarded. Opium to check an exhaustive diarrhea is still recognized as indispensable, although it is now employed much more rarely than in former years. Digitalis and the diffusible cardiac stimulants are now and then resorted to, but in no sense constitute a prominent feature in the systematic conduct of these cases. So far as medication is concerned, it is believed that efforts in this direction should be made mainly to an attack upon the specific septic condition which is found to exist in the intestinal tract. During the past year salol has been the one means employed to accomplish this important mission. This is given in three-grain doses every three hours, and in not a few instances cases have been conducted to a successful termination without the addition of any other remedy. While it is thought that this most useful drug has an important bearing upon the temperature of the patient as an antipyretic, it is firmly believed that this is secondary to its chief and more essential office as an antiseptic. A very apparent result following upon its use is the rapid and almost complete disinfection of fecal discharges, as evidenced by absence of odor. It seems impossible to speak too enthusiastically upon this subject. The ward mates, the attendants and the patient himself have not infrequently commented upon this fact, and while excretory products are subjected invariably to more powerful disinfectant agents in the interest of hygienic precautions, such measures seem hardly necessary so far as offense to the olfactory organs is concerned.

The following statistics taken from the hospital case books comprise the typhoid fever cases treated in this institution during the past three years. While the numbers are so small that no positive deductions can be drawn therefrom, they are still not totally devoid of interest. In the year 1887, 10 cases were treated after the usual fashion of desultory medication. Of these, 5 died. In 1888, 35 cases were treated, most of them by the same method as in the year preceding. Of these, 7 cases died. In 1889, 23 cases were treated, all by the method prescribed in the present paper. Of these, 1 case terminated fatally, and it is but fair to add, in conclusion, that this patient had been ill many days prior to his entrance, and died a few days thereafter.

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THE SURGICAL TREATMENT OF COMPLICATIONS IN LEPROSY.

By SYDNEY BOURNE SWIFT, M. D., Resident Physician Leper Settlement, Molokai, H. I.

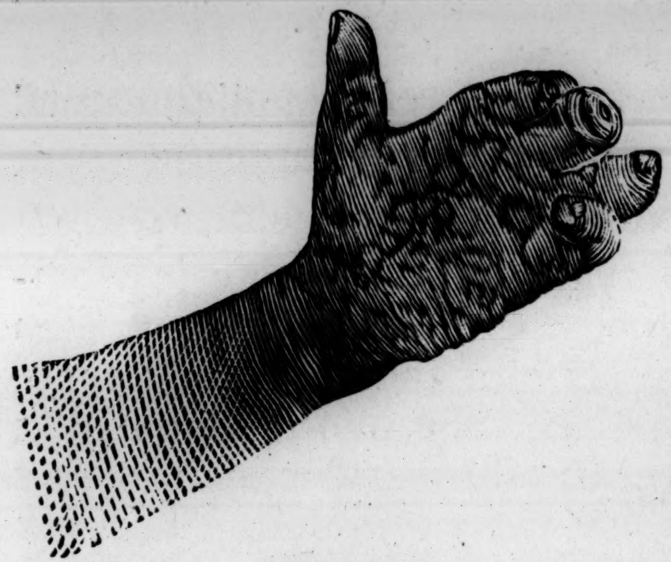
A number of cases are to be seen at Molokai, that individually would be proper subjects for an elaborate treatise, but as they occur by dozens, they receive only ordinary notice. In the complications often arising during the progress of the disease, surgical interference is frequently demanded. The immediate benefit derived from operative procedure is usually most marked, and the tolerance of the subjects, and the successful results often obtainable, are remarkable, when we consider the grave constitutional condition of many of the patients. The following cases are taken as examples of results in extensive suppuration:

Case No. 757.—Consulted me in regard to an abscess of the left hand, immediately behind the palmar arch. This was evacuated and poultices applied. Next day the part was explored with an ordinary pocket-case probe, and "no bottom could be found." A mixture of arnica and iodine was injected, the hand poulticed and placed in a sling in such a manner as to favor drainage by gravitation. This treatment was kept up for 4 or 5 days, and on again probing, I found that the sinus had extended to within 1½ inches below the flexure of the elbow. An abscess had formed on the line of the sinus, and on opening it up a large quantity of pus escaped. The sinus was thoroughly washed out and the iodine and arnica injected. The case remained under observation a few days longer, when unguardedly I remarked that if it did not heal more rapidly, I would be obliged to do some cutting. The patient was evidently opposed to any more surgery, as he purposely kept out of my way. In two weeks' time I called at

Case 757.
Showing Sinus.

his residence, and was agreeably surprised to find nothing but two cicatrices to indicate which hand had been treated.

Case No. 459.—This was one of ulceration of the 4th finger of the left hand. The part was much inflamed, and joint exposed; the ungual phalanx was extirpated. A sinus was found extending along the finger to a point immediately below the metacarpo-phalangeal articulation. Cutting down on the probe, I found the palmar fascia dissected up by a large quantity of pus. The tendon of the flexor profundus digitorum appeared to float in the fluid; two of the metacarpal bones were plainly in view. Iodine and arnica was injected and poultices applied, recovery ensuing in 5 weeks.



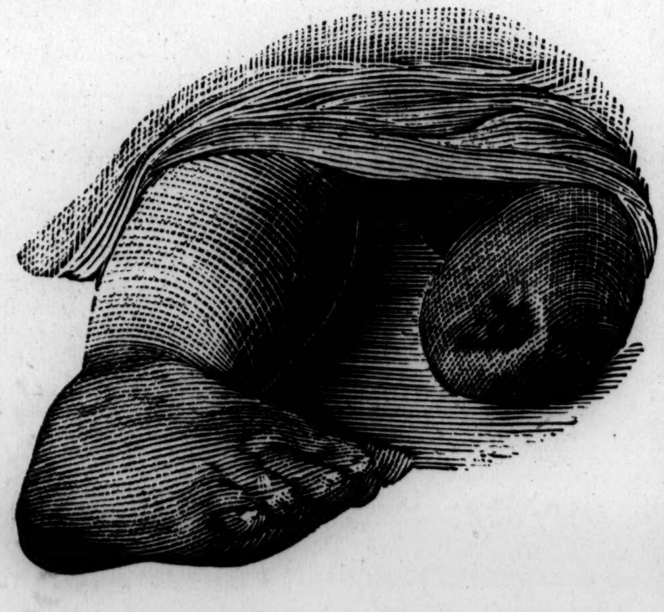
Case 459.

Keaweluahi came to me with the index finger, left hand, swollen to an enormous size. He was most solicitous that I should amputate it; from this I endeavored to dissuade him, stating that I had repeatedly observed similar cases, where abscesses had formed in the palm, at the wrist, and in the supra trochlear region, and that such were the result of a too hasty resort to amputation. An incision was made, down to the ungual phalanx, as though it were a felon, a small quantity of pus following the knife. Poultices, etc., were applied. For 2 or 3 days the man called at my office, begging of me to amputate, stating his willingness to assume the responsibility, etc. I therefore removed the finger at the metacarpo phalangeal articulation. The wound healed readily, but in 6 weeks' time an abscess formed in the palm, another at the wrist, and the forearm was enormously swollen. The abscesses were opened, poultices applied, and the poor fellow went home and hanged himself.

The sinuses of which I have spoken, are caused by the slow ulceration of tendons or nerves. The interosseous membrane is another focus of suppuration. This is a common condition in all types of leprosy. Where I have advised the postponement of amputation, it was with the view of enabling me to select the proper part, and thus obviate the necessity of a repetition, for the chances are that if no good comes of the first operation, you will not be afforded an opportunity of rectifying matters. I have seen a great many cases of gangrenous extremities, and I have never yet observed one where "the line of demarkation" was at all satisfactorily marked. Nothing short of exploratory incisions will enable one to form the faintest idea of the conditions within or whether the disease will extend after the operation. It must be borne in mind that in most of these cases there is a certain amount of anesthesia in the part, and we have to depend exclusively upon objective symptoms.

The following cases are illustrative of a class demanding capital operations. These are, as a rule, well borne, the untoward result in the second case being most probably due to an accident.

Kamaka, aged 20 years, mixed type, the anesthetic predominant, came under treatment August 10, 1889. She was then suffering acutely from chronic ulceration of the left tarsus; there was a very profuse and fetid discharge. She informed me that a similar state of affairs had existed on a former occasion, in fact she had suffered from this foot since early girlhood. The foot was distorted, being nearly as broad as it was long. On the right foot there was an old cicatrix immediately over the external cuneiform, and the plantar surface was turned somewhat inwards.[1] She was placed on the expectant line of treatment, not with a view of recovery, but that possibly she might conclude to be operated upon. To my great surprise the discharge ceased and the foot seemed to heal. For two or three months she was free from pain, but was unable to do more than hobble about her room, or a short distance to her meals. At the end of this time the foot again began to swell, accompanied with much pain, fever, and the usual concomitants; poultices were applied and analgesics administered, but the conditions gradually grew worse, until it was evident, that unless amputation was immediately performed, she must lose her life. On March 15th, 1890, assisted by Dr. A. Lutz (who was on a visit to the settlement), and two Sisters of Charity, I made the amputation. Opening up the tarsus and passing my finger into the incision, the tarsal and metatarsal bones felt as though they had lost their interosseous attachments, and could readily be removed with the finger and thumb. I made two other exploratory incisions, over the anterior and posterior tibial arteries, selecting as the site of amputation the junction of the lower and middle third of the leg. No attempt at antisepsis was made; it would have been ridiculous to think of such a thing in a room where 15 or 20 leper girls in all stages of



Case of Kamaka, showing inverted foot and stump.

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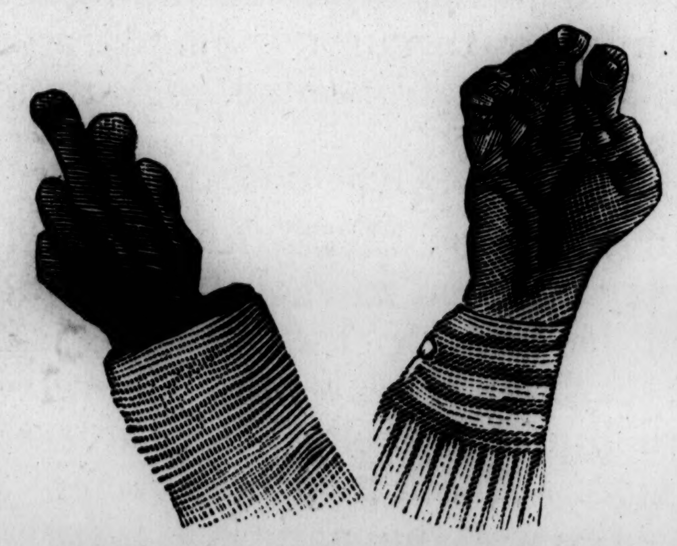
[1] The deformity has since become very pronounced, so that at date the plantar surface is on a plane with the inner aspect of the leg. I believe that this condition is in a very great measure due to partial absorption of the astragalus, of course not ignoring the action of the tendon.

the disease slept. Scrupulous cleanliness was observed, but healing by first intention was rather discouraged. For 3 days I took the temperature, once daily, and found it slightly subnormal. A little wine overcame this condition. After the third day there was not the slightest cause for uneasiness. In three weeks the stump had almost healed, the careworn, haggard and hectic expression had vanished, the appetite and spirits were good, and the patient was accordingly discharged.

Kealii, aged 14 years, has been under treatment for various complaints off and on for several months. One brother died here a short time ago, and another, the youngest of the three, is equally advanced in the disease, which is pronouncedly of the tubercular type. For the last 3 months Kealii has suffered from chronic inflammation of the ankle joint. He was an inmate of the Boys' Home at Kalawao, and has had excellent attention at the hands of Mr. Joseph Dutton. The joint was much swollen, and exquisitely painful. Some time ago I passed a large aspirating needle into the swelling, but failed to tap the pus, which was evidently pent up in sacs beneath the ligamentous structures. Poultices were applied. In the course of time an ulcer the size of a dollar formed on the outer side of the foot, almost laying bare the maleolus; on the inner side were numerous fistulous openings running into the tarsal articulations; in fact, the foot was completely honeycombed by these fistulæ. He was also suffering from leprous diarrhea, and two indurated and suppurating bubos in the groin. I proposed amputation, which was declined. On April 4, 1890, I had occasion to leave the settlement for two or three days, and I expected that the boy would have been dead ere my return. Returning, however, on the 8th, I found him much emaciated, suffering excruciating pain, and most anxious for an operation. Next morning I amputated at the lower third of the leg. Owing to the breaking, twice, of an Esmarch rubber cord, the operation was not a bloodless one as I intended it should have been. The stump was dressed with carbolized water dressing, in an orthodox manner. There were here two serious complications, viz.: leprous diarrhea and hectic fever. Quinine, Dover's powder and bismuth were prescribed, with Malaga wine and raw eggs as a stimulant. The sinuses ramifying through the indurated inguinal glands were injected with dilute. tr. iodine. A rapid improvement of all conditions ensued. I make it a rule to personally dress all such cases for the first eight or nine days. On one occasion, April 21, I made an exception to this rule. Feeling unwell and tired, I instructed my assistant to visit the boy and dress his leg in the manner that he had repeatedly witnessed. After irrigating the stump with carbolized water he saturated a piece of cheese cloth, with pure liquid carbolic acid; covered this with rubber cloth and a bandage. About two hours after, I was routed out of bed in great haste to see the patient. I found him in a comatose condition, respirations shallow, pupils contracted, cornea insensible to touch, but the pulse encouraging. As the boy had been given Dover's powder in 2½-grain doses every two hours, and could have helped himself to more, I was at first inclined to attribute his condition to opium poisoning, until I had been informed about the carbolic acid. I administered hypodermically, 3 syringefuls of solution of sulphate of soda (20 per cent.), irrigated and dressed the stump with a saturated solution of the same, applied a mustard plaster to the nape of the neck, and in three hours afterwards the boy was sitting up eating his supper. As may be expected, the healing process, slow at the best, was considerably retarded by this accident, and his condition generally received a complete set back. His bowel trouble was much aggravated, the tongue looking fiery red and glazed; he complained of a dull aching pain in the region of the small intestines, and an insatiable desire for cold water. He died from enteritis on the 25th, 16 days after the operation, and 4 after the accident.

The successful termination of the first case seems to render it worthy of record, when we consider the surroundings, the general condition of the patient and the constitutional disease necessitating the operation. The rapid disappearance of all the momentous symptoms afford the prospect of a new lease of life and I shall watch the patient with considerable interest. The fatal result in the second case was wholly unexpected. The patient had had the most assiduous care, dietetic and medical, and I am inclined to the opinion that the carbolic acid exercised an effect upon the intestines similar to croton oil. My assistant, who is a far advanced tubercular leper, suffered quite seriously from this accident, his hands were badly burned, and he experienced one or two slight attacks of vertigo. He also informed me that he felt as though he were intoxicated all that day.

The absorption of bones, especially of the phalanges, to which I have already alluded, is quite phenomenal. I have seen, in many cases, 3 or 4 of the phalanges removed in this manner, leaving the nails growing at or about the metacarpo phalangeal articulations, without the slightest evidence of their ever having been any ulceration or even abrasion of the skin. In several instances I am convinced that that some of the bones have


Hands showing absorption of bone.

been reproduced. I have photographed hands, and in 6 or 8 months afterwards there seems to have been a growth of bone sufficient to make the hand unrecognizable from the picture. I have long since suspected that absorption takes place in the vertebræ, which may partly account for some of the peculiar and, to me most perplexing nervous manifestations.

MEMORANDA.

A Case of Placenta Previa.

M. S——, aged 30, had had one child 15 months previous, delivery being effected by the forceps. During the second pregnancy, hemorrhage first occurred at the sixth month. It was slight and easily controlled by rest, with the administration of opium and the viburnum prunifolium. Between the sixth and eighth months several hemorrhages occurred, and twice the tampon was resorted to. At the beginning of the eighth month I was summoned one night, and found the patient in an alarming condition, with a pallid, anxious countenance, and flowing profusely. The os was slightly dilated, and the placenta could be felt pressing down into it. Stimulants were employed, and the vagina was filled with dampened cotton crowded well into the upper portion. At the end of two hours the tampon was removed, whereupon the bleeding started afresh. Although the os was not fully dilated, the cervix was very soft and the parts greatly relaxed, and as the patient had been continually getting weaker, it was deemed proper to effect delivery as speedily as possible. Owing to the lack of skilled assistance and the exhausted condition of the patient, no anesthetic was used. Under antiseptic precautions the hand was introduced into the vagina, the fingers passed between the placenta and the uterine wall, and the membranes ruptured. The feet were then brought down and delivery was rapidly completed, the child being dead when born. Immediately after delivery the flowing, which the pressure of the child's head and the operator's hand had temporarily checked, was renewed. The hand was again introduced and the after-birth removed without difficulty. Cloths dipped in ice-water were then applied to the abdomen, and the "alum plug" was introduced into the os. Free stimulation was employed, the patient soon rallied from the state of threatening collapse into which she had fallen, and eventually made a good recovery. BRADFORD WOODBRIDGE, M. D.

Cedarville, Cal.

REPORTS FROM THE HOSPITALS AND ASYLUMS OF THE PACIFIC COAST.

SAN FRANCISCO RECEIVING HOSPITAL.

UNDER THE CARE OF R. E. BUNKER, M. D.

[Reported by GEO. B. SOMERS, M. D.]

Fracture of Skull—Extensive Blood Clot—Recovery.

F. K——, æt. about 25, during a quarrel over a game of cards, was struck on the head with a heavy porcelain match-box. He was found in the street in a dazed condition, and was brought to the Receiving Hospital. No history was obtainable at the time, and he was supposed to be drunk. On examination, a slight scalp wound was found on the left side of the head, which was sutured. No fracture was detected. The wound was dressed, and the man put to bed. About 11 A. M., nearly five hours after entering the hospital, Dr. Bunker examined the patient, and found complete paralysis of the right side. Pins stuck into the left leg caused response only from the left arm. The patient was immediately placed on the operating table, and the lacerated wound of the scalp reopened and enlarged. After considerable search, a stellate fracture was discovered, but no depression. Three or four buttons were trephined out at the seat of the fracture, exposing a large clot. All of the clot visible was turned out of the opening, but there was evidently more. On exploring with the finger, the clot proved to be of surprising size. The opening had been made through the parietal bone, about two inches above the mastoid. From this point the index finger, used in enucleating the clot, reached to the falx cerebri above and to the tentorium cerebelli behind. The brain was depressed from the bone fully one and a-half inches. The cavity was thoroughly cleansed by irrigation with a 1.2000 solution of corrosive sublimate. The brain did not immediately return to its normal position. A drainage tube was inserted, the wound closed, and the patient put to bed with an ice-cap. Inside of three hours he regained consciousness and was able to talk, but was still slightly paralyzed on the right side. The next day the paralysis disappeared, and the patient felt so well that he wanted to get out of bed. From this time up to the fifth day after the operation he complained continually of being confined to bed, and then he would stay in no longer, but got up and went home. He reported every two days to have his wound dressed, but after six dressings considered himself well and disappeared.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal. and

HENRY GIBBONS, JR., M. D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Obstetrical Antisepsis.—The triumphs of obstetrical antisepsis, said GALABIN at the International Medical Congress, seems due to the use of the bichloride to disinfect not only the hands and instruments, but also the genital canal before and during labor, as well as during the puerperal period. As compared with carbolic acid and permanganate of potash, the bichloride has reduced the total mortality from 10 to about 2:1000, and the mortality from septic infection to 1.5:1000. The lighter febrile attacks have been reduced 50 per cent. in frequency, but the most striking results are seen in the reduction of the ratio of septic infections. In the General Lying-in Hospital, of London, this ratio has fallen from 40 to 2.5:100. These excellent results have been promoted by the use of hair mattrasses, which are disinfected by heat as soon as an unfavorable case occurs. The vaginal injections should be of a strength of 1:2000—1:4000 is not sufficient. Previous to each examination the hands should be disinfected in a solution of 1:1000. In normal cases, a single irrigation (1:2000) is probably sufficient. In operative or febrile cases, irrigations should be employed for four days at least. STADFELT defended the following propositions: (1) With proper antiseptic precautions, lying-in hospitals may be safely utilized for the purposes of clinical instruction. (2) The introduction of subordinates directed by midwives is useless, frequently even dangerous. (3) The adoption of obstetrical antisepsis has been ex tremely beneficial to the new-born. (4) In private practice midwives should keep their clothes, their persons and their instruments aseptic. Perfect cleanliness should be enjoined and reënforced by cheap and manageable antiseptics—preferably carbolic acid. Midwives should not nurse febrile lying-in cases. (5) The patient as well as her surroundings should be antiseptic, but it is to be feared that vaginal injections in the hands of midwives would be more injurious than beneficial. (6) During labor, the midwife should practise touch as little as possible. (7) Cases of fever arising during the puerperal period should be reported to the sanitary officer, whether a midwife or a physician is in charge. Repeated cases of fever occurring in the practice of a midwife necessitate the most energetic measures for disinfection, and even temporary suspension of practice.—*Médicine Moderne*, August 7, 1890.

Pencils of Chloride of Zinc Paste in the Treatment of Edometritis.—GRANDMAISON presents the following conclusions: (1) The pencil of chloride of zinc introduced and left in the uterine cavity is a certain method of cure of chronic endometritis. (2) If proper precautions are observed, atresia and stenosis are not to be feared. (3) After this treatment the menstrual function returns normally. (4) Pregnancy is possible after cauterization.—*Gazette des Hôpitaux*, August 9, 1890.

The Cure of Suppuration Originating in the Uterus or its Annexes.—In a communication to l'Academie de Médicine, PEAN presented the following conclusions: (1) Suppuration limited to the uterus may be cured by antisepsis of the cavity, cauterization, progressive dilatation and curetting. (2) The lighter forms of suppuration of the tubes may be cured by simple dilatation of the uterine cavity. When recent pus in small quantity accumulates in a non-adherent cyst, tubo-ovarian castration is to be recommended. If the pus sac be unilateral and adherent to the corresponding margin of the uterus, it is advisable to separate the vagina from the cervix at their junction, carefully dissect the peritoneum up without entering the general peritoneal cavity, introduce a drainage tube and irrigate antiseptically. If the purulent tumor be large, bilateral and extensively adherent, these means will frequently be inadequate and vaginal hysterectomy is advisable. This establishes free drainage, facilitates antiseptic irrigation and puts the patient in the way of earlier and more certain cure. (3) If the purulent accumulation takes place in one of the broad ligaments and points into the vagina, free incision, drainage and irrigation will suffice. If the phlegmon be high up it may still be reached, under antiseptic precautions, by dissection along the lateral margin of the uterus. If pus form in both ligaments, seek exit either by the rectum or bladder and threaten the life of the patient, vaginal hysterectomy is indicated and furnishes marvellous results. (4) Distinctly circumscribed suppurative pelvic peritonitis should be incised early. If suppuration be extensive and have invaded the uterine annexes, vaginal hysterectomy becomes urgent and has always afforded the best results. (5) The surgical therapy of suppuration of the uterus and its annexes is then determined by the extent and gravity of the suppurative process. Removal of the tubes and ovaries by abdominal incision is frequently abused and generally insufficient. Vaginal hysterectomy, on the contrary, has hitherto been crowned with success.—*Riforma Medica*, July 25, 1890.

A Sovereign Remedy for Post-Partum Hemorrhage.—This terrible accident of childbirth, says CANDELA, has in its turn become amenable to active surgical intervention. As a last resort in this condition, Lomer proposed hysterectomy, by Porro's method. Saenger suggested that inversion of the uterus would obviate the necessity of laparotomy and convert the operation into a vaginal hysterectomy. Kocks, of Bonn, now proposes artificial inversion of the uterus in intractable cases of this kind. The compression exercised by the cervix, the application of pressure or astringents directly to the bleeding points, or compression by Esmarch's bandage effectually controls the hemorrhage. Kocks relates a case in which after inverting the uterus he applied a ligature to the cervix; the hemorrhage ceased; in six hours he removed the ligature and reduced the inversion. No fever followed, and the woman was discharged three weeks later. Inversion is effected by suprapubic pressure with one hand while the other dilates the cervix, and then either makes traction on the cord or on the fundus by means of Muzux forceps. According to the author, inversion does excellent service in Cæsarean section—permitting as it does the ligatures to remain in the uterine cavity, and preventing the escape of lochia into the peritoneum as well as the adhesion of the uterus to neighboring organs. This procedure will hardly come into frequent use, for, when hemorrhage is not severe or when delayed long after labor, it is not indicated, and when hemorrhage is sudden, the life of the patient in imminent danger, other methods of more immediate and rapid application must be adopted.—*Cronica Medica*, July 20, 1890.

Development of Puberty and its Relation to Diseases of School Children.—In man, says DR. KEY, the most rapid growth takes place during the eighth year. Subsequently, the growth is uniform for four or five years—the most remarkable development taking place in the male during the 17th year and in the female from the 12th to the 15th. The period of puberty varies in different nations, but everywhere it is a critical period. Climatic and social conditions influence its establishment—poverty retarding, heat promoting it. During this period more than one-third of all children become the victims of chronic disease, which increases with each school year. The disease-curve falls after puberty to rise again at the age of nineteen or twenty. The school-hours of Swedish children are so long and their labors so sustained that their sleep is insufficient. Excessive labor hinders the spontaneous development of young children.—*Gazette des Hôpitaux*, Aug. 12, 1890.

The Remote Results of Removal of the Tubes and Ovaries.—*Apropos* of the experiences of Dr. Coe (MEDICAL TIMES, June, 1890,) may be mentioned the results obtained by DR. HOWARD A. KELLY (*Johns Hopkins Hospital Bulletin*). He bases his remarks upon 96 cases of tubal and ovarian disease, for which laparotomy was done between the years 1886 and 1888. Among these are, first 25 cases of tubo-ovarian abscess. Some of the unpleasant sequelæ are cited as follows: Two cases had uterine hemorrhages; three cases had fecal fistula, and one of these a urinary fistula also; two cases had encysted masses left near the womb; two cases had hernia; two cases continued to have the same headaches as before. The condition of these was, however, improved. All of the remainder, or 13, were cured. Of the 33 cases of salpingitis and ovaritis 13 were cured, 17 improved, 1 died from unknown cause, 1 still has distressing dysuria, and 1 is not improved. Out of 35 cases of lesser disease of the ovaries and tubes 8 were cured, 7 very much improved, 13 improved, 5 slightly improved, 2 not much better. Of the total number there were 34 cured, while "of the remainder there was a large proportion suffering from various delicately differentiated degrees of improvement. The writer admits no positively bad results. His standard of what is cure and what is improvement is largely a surgical one, based upon a consideration of the local condition. There is little note made of the general condition of health and capacity for work and enjoyment; the marked and peculiar influence which a removal of the ovaries has upon a neurotic woman; its alleged tendency in some women to cause insanity is not referred to, and probably was not observed by the writer. On the whole, however, Dr. Kelly takes a reasonable view of the indications and effects of the operation, and he candidly admits that in estimating its results one should consider not only the possible mortali y, but also the immediate accidents, such as hernia, fistula, hemorrhage, etc. He urges that, like an amputation, its results must be often justified in that it saves from worse suffering and possibly from death. From a practical standpoint, he adds, in conclusion, there are two classes of cases in which the operation is called for. They are the necessary and the elective. 'Salpingo-oöphorectomy performed for fibrous tumors choking the pelvis and pressing on rectum and ureters, and for pyosalpinx, is an operation necessary to save life. Salpingo-oöphorectomy performed for chronically inflamed ovaries and tubes or for small ovarian cysts, or blood cysts of the ovaries, is a purely elective operation.' "—*Medical Record*, August 2, 1890.

Puerperal Eclampsia.—DR. R. T. TRIMBLE reports 65 cases of puerperal convulsions occurring in the practice of 18 physicians of Highland and Clinton counties, Ohio. Of these 41 were primiparæ and 24 multiparæ, and 6 in twin labor—an unusually large proportion of multiparæ. Of the 50 cases accurately reported 46 occurred at full time, or nearly so, 2 at the seventh and 2 at the eighth month. Convulsions occurred in 3 cases before, in 27 during and in 20 after labor. There were 9 deaths—a small mortality; five only of these were primiparæ. Three of the deaths were among the 20 in whom convulsions began after labor—a large proportion. Of the cases that recovered several were treated with bromide of potash and chloral, but the larger number by veratrum viride from five to fifteen drops of the tincture frequently repeated until its effect was produced. Bleeding was practised in seven cases, with four recoveries. Labor was terminated naturally in 29 cases; in 5 the forceps were used and in 6 turning was resorted to. The conclusion reached by the author is that veratrum viride is a potent remedy in these cases, and the result seems to bear out such a conclusion, since of the 26 cases in which it was used only 3 died.—*American Journal of Obstetrics*, August, 1890.

False Pregnancy.—DR. THOMAS MORE MADDEN concludes a short paper on this subject as follows: "I have merely to reiterate what I am convinced by practical experience to be a much needed warning as to the importance of greater caution than is sometimes exercised in answering, without sufficient knowledge, the often asked question: 'Is the person in whose case we are consulted actually pregnant or not?' On our reply to that apparently simple query may possibly depend the fair name of a girl, or the happiness of a wife, or even the life of a woman condemned to capital punishment, in whose case the plea of pregnancy may be raised in stay of execution. Issues so grave are not to be lightly regarded or hastily disposed of; and in his decision thereon, as in all other obstetric difficulties, the practitioner's judgment should be arrived at and acted on '*nec temere*, *nec timide*.' "—*American Journal of Medical Science*, July, 1890.

Peritonitis in the Female.—DR. S. C. GORDON remarks upon the greater frequency of peritonitis in the female than in the male, but the greater gravity of the disease in the latter, and refers the more frequently fatal result in males, in part to its causes, traumatism, and concretions and foreign bodies in the appendix vermiformis, to which males are more prone; and the greater frequency of the disease in females to the anatomical arrangement of the pelvic organs of the latter, and notably the opening into the serous cavity of the abdomen through the fallopian tubes, by which road septic material may enter the cavity. He refers also to the passage of the gonorrheal virus in this way, as well as the products of endometritis arising from its various causes, of which abortion stands first, and of the tendency of a peritonitis to favor recurring attacks. A number of cases are recorded to show that the inflammation had its starting point in the fallopian tube. But, while peritonitis with suppuration about the tubes occurs with some frequency, the non-suppurating form is much more common, and arises largely also from inflammation about the fallopian tubes. Three-fourths of the *post-mortem* examinations on women show inflammatory disease of the fallopian tubes, says Henning. Winckel found 205 in 500, and Waldo found evidence of inflammation in at least one-half the autopsies. Dr. Gordon believes that an important means of differential diagnosis between peritonitis arising from sepsis from the intestinal canal, and that from the uterus through the fallopian tubes, lies in the difference of temperature found in the two forms of the disease. He has uniformly found a low temperature, rarely above 101°, in the former, and a high temperature, rarely below 102° in the latter. As prophylaxis, in chronic endometritis, he advises dilatation and curetting of the uterus, injection of hot water or sublimate solution, 1:2000, and thorough touching of the cavity with pure carbolic acid. Latterly a piece of iodoform gauze pushed up to the fundus and left hanging out of the vagina, is kept in position for 2 days to insure efficient drainage. If peritonitis have begun an enema of concentrated solution of Epsom salts will often abort the attack. Opium, if pain be severe. Should general peritonitis with pus result, he advises laparotomy and irrigation. If the pus cavity be circumscribed, laparotomy is deferred to the chronic stage. In the non-suppurating variety resulting in adhesions, a systematic course of local depletion by cathartics, leeching, glycerine and pressure by tampons of wool, etc., is advised. —*American Journal of Obstetrics*, August, 1890.

Treatment of Obstructive Dysmenorrhea.—DR. THOMAS MORE MADDEN writes: "In the recognition of obstruction from cervical stenosis as the chief cause of dysmenorrhea will be found the key to the pathology and successful treatment of this condition in the great majority of cases. Thus, in my hospital practice during the past 12 years, nearly 11 per cent. of this form of dysmenorrhea or of sterility similarly caused, have come under observation in a total of 9,000 gynecological cases. Of all the ailments of female existence, few give rise to more persistent suffering, or produce more disastrous effects on the general health, and also more especially upon the cerebro-nervous system, or even on the moral constitution of the patient, than does well marked obstructive dysmenorrhea. The latter consequence is evident in many cases of alcoholism, which in women may very frequently be dated from their first painful menstrual period, for the relief of which stimulants are too often improperly administered and repeated in increasing doses, until finally, in many cases, the victim of dysmenorrheal alcoholism becomes a habitual and, perhaps, incurable drunkard." To overcome this cervical stenosis, Dr. Madden refers to the many means in use, the sponge and laminaria tents, the rapid dilators of Heger, Duke and Lawson Tait, and then mentions a new instrument of his own designing. It differs from all other dilators in producing expansion of the canal from within outward, thus imitating the natural process, and its efficiency has been demonstrated in a large number of cases in hospital and private practice. —*Lancet*, July 5, 1890.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital Sacramento, Cal.,
J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal., and
G. F. SHIELS, M. D., C. M., F. R. C. S. E., Surgeon Polyclinic, San Francisco, Cal.

Antiseptics and Anesthetics at Berlin.—It was evident on all sides at the Berlin Congress that antiseptic or rather aseptic surgery is held in the very highest repute in that city. A glance at the operating theatre of any hospital was further sufficient to show the extreme care taken and the lavish expenditure that had been incurred, so as to render all wounds perfectly aseptic. The instruments are all kept in glass and iron cupboards which are easily washed throughout. Scalpels are all composed of one piece of metal, rendering it impossible for dust or dirt to collect in grooves or joints. The operating table is constructed of one slab of light green glass about an inch thick, resting on an iron frame, and running upon wheels with rubber tires; and in offices adjoining the theater are ovens for the sterilization by means of dry or moist heat of dressings. Professor Sonnenberg exhibited the dress worn by him during operations, which included even goloshes. In Professor Bergmann's clinic in the Ziegelstrasse, similar precautions are constantly observed. But in spite of the efforts to excel by this extreme attention to the details of antiseptic surgery that were everywhere observable, it was somewhat disappointing to learn that chloroform is still constantly employed for the production of general anesthesia during surgical procedures, not only in Berlin, but throughout Germany. Possibly Dr. Horatio Woods' powerful address in favor of ether may direct attention to the compounds such as ether and the A. C. E. mixture, which operators in this country and America, generally recognize as less liable to endanger life than chloroform.—*British Medical Journal*, August 23, 1890.

Operative Procedures in the Bone Diseases of Childhood.—In a recent discussion on this subject before the New York Surgical Society, DR. STIMSON said, the statements as to the superiority of arthrectomy in the treatment of diseases of the knee, if by that was meant extirpation of the capsule alone, were not borne out by his experience. Extirpation of the capsule alone, in his experience, had been followed by return of the disease and excision in every case. The speaker thought that excision did not contain many elements of danger to life, and that it was generally followed by permanent, satisfactory and complete recovery. As an operation for tubercular disease, it was the one which had given the best results. DR. GERSTER said that a distinction must be made between tuberculous joints in children and those in adults, and different principles must obtain in practice. When it was remembered that a very large number of the tuberculous knee joints occurred among the poorer classes, with whom prolonged treatment was impossible, there was no alternative but to amputate the limb or excise the joint. Undoubtedly in children the removal of the capsular ligament and semilunar cartilages yielded excellent results at certain hands. He believed that for children the method deserved trial before excision. DR. WYETH said that his ideas on this subject led him rather decidedly into the operative field for the treatment of knee joint troubles regardless of the age of the child. He thought it rare to meet with a child under five years of age with a tuberculous osteo-arthritis of the knee. Since persistent meddling with the joint for from one to five years is fraught with much danger, he was inclined to discourage delay, and deal promptly with these cases by excision, which he regarded as an exceedingly safe operation. He could not recall in his experience a single instance of death resulting from this procedure except in traumatic cases. DR. F. KAMMERER thought the merits of arthrectomy or excision was still *sub judice*. He had resected many times and generally found the focus of disease in the bone itself. He considered the conservative treatment suggested by Dr. Gibney as perfectly in place. He had on the continent, witnessed many resections which ought never to have taken place. The moment crepitus was felt it was the signal for resection, decapitation or subtrochanteric resection, when conservative measures would undoubtedly have given much better results. DR. GIBNEY said that he felt with Dr. Stimson that excision of the knee for adults was the thing to do, but the line had to be drawn between children and older children and adults. By arthrectomy, he meant complete eradication of the capsule with the cartilage and entire removal of any diseased foci. It was the custom to wait too long in the case of adults. They were told to put the joints at rest. The joints gradually got unstable, abscess appeared, and the patient was then allowed to go around waiting for the abscess to mature. These cases should be taken hold of early, the disease removed, and the patients thus insured sound limbs.--*New York Medical Journal.*

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

A Galvano-Cautery Amygdalotome.—DR. JONATHAN WRIGHT has designed a cautery snare which can be adjusted to the Mackenzie amygdalotome, for the removal of enlarged tonsils in adults. The cases of alarming or fatal hemorrhage have been numerous enough to induce him to seek a safer method than the ordinary cutting operation in the hard fibrous tonsils of adults, and after trying other methods of treating them, Dr. Wright settled the subject by inventing an instrument which excises the tonsil, as far as it has been tried, without causing any alarming loss of blood.—*New York Medical Journal*, August 30, 1890.

A Case of Myxoma of the Epiglottis.—DR. VANDER POEL reports the case of a patient from whose epiglottis he removed a tumor the size of a horse-chestnut. Microscopic examination showed it to be a myxoma. The patient was a German, æt. 44, had been perfectly well up to seven months previously, when he began to lose strength and flesh. He soon noticed a sensation of the presence of a foreign body in his throat and difficulty in deglutition. There was no pain, talking was difficult, and there was hoarseness or loss of voice in its prolonged use. At night he had attacks of suffocation. When first seen he had become greatly emaciated, walking with effort and apparent distress. He ascribed his weak condition to inability to take but small quantities of liquid food. There was a distressing cough and it was with great effort that he cleared the throat of mucus. He had cardiac pain, and an examination revealed a blowing mitral murmur with dilatation of the left ventricle. The growth was seen to spring from the lingual side of the epiglottis attached by a broad base to the glosso-epiglottic fossa of the left side. Palpation showed it to be soft, imparting the sensation of fluctuation. Aspiration failed to withdraw any fluid. It was therefore decided to remove the growth with the galvano-cautery snare, under cocaine anesthesia. The operation occupied twenty-five minutes and was free from hemorrhage. No symptoms of inflammation followed, and the patient could swallow without pain or discomfort two days later. His appetite and strength, however, failed to return. After a few weeks there was a slight recurrence and the patient continued to become weaker, dying about six weeks after first being seen, with symptoms indicating pernicious anemia. The *post-mortem* examination did not discover malignant growths in any other part of the body or any lesion sufficient to cause death. The proportion of white blood corpuscles to red was 2:5.—*New York Medical Journal*, September 6, 1890.

Visual Disturbances from Malarial Infection.—After reviewing the literature of the subject, DR. D. E. SULZER gives his experience with visual troubles resulting from malaria, acquired mostly in Java, but less frequently in Sumatra and Borneo. A majority of these disturbances consisted of chronic neuritis and were developed from chronic malaria—the malarial cachexia. The cases, almost without exception, were accompanied with enlargement of the spleen and other symptoms of chronic malarial poisoning; only rarely were the symptoms not typical in regard to temperature, etc. The most prominent subjective symptom of this chronic trouble is the marked fluctuation of the visual acuteness. The vision falling to $\frac{1}{10}$ may in a few days equal ½ or ⅔ normal, and again, within a short time, lose what had been gained. The trouble is nearly always binocular but usually it does not begin in both eyes at the same time. It is commonly more severe in one eye than in the other. The visual field is either intact or slightly contracted. Color perception is normal. Occasionally hemeralopia and photophobia were present. The ophthalmological appearance has been described by Mussy and Poncet, as follows: The papilla is swollen and of dark grayish-red color. The circumpapillar portion of the retina is slightly clouded; the veins appear large and tortuous. The discoloration of the papilla is characteristic of the trouble. This discoloration, that Poncet describes in connection with pernicious fever, depends upon the presence of pigment cells contained in the inflammatory cells of the enlarged capillaries of the papilla, and also upon a true melanosis of the nerve. Repeated ophthalmoscopic examinations of a large number of patients suffering from chronic malarial neuritis, has convinced the author that in a large proportion of cases, malarial cachexia, melanosis of the papilla is present. The most certain treatment is to remove the patient from the malarious influence. This, however, can often not be accomplished, but it should be distinctly stated that as long as the patient resides in a malarial district, he may be subject to recurrent attacks of loss of vision. Arsenic in connection with tonics is especially useful in this condition. In 8 per cent. of the cases, a slow atrophy of the optic nerve with irregular contraction of the visual field took place. This was due to anemia arising from an endarteritis of the retinal capillaries. In about one-third of the cases, small peripheral retinal hemorrhages were found. Diffuse infiltration of the vitreous was seen in two cases in which the vision was reduced to the perception of light. Both patients were highly cachectic and anemic. After three months' treatment, with periodic doses of quinine, and absence in the mountains, the patients recovered sight. A third form is produced by acute febrile attacks. When the temperature is elevated, the patient complains of a burning sensation in the eyes, intense flashes of light before them and photophobia. During the height of the fever, as well as during the remissions, the veins and arteries are hyperemic, the papilla and retina red and swollen. The retina appears as though covered by fog. The visual disturbances caused by malarial cachexia may be classified as follows: (1) Chronic optic neuritis, in severe cases combined with melanosis of the papilla. (2) Diffuse infiltration of the vitreous humor. (3) Numerous small hemorrhages in the peripheral portion of the retina. (4) Sudden permanent blindness, probably arising from central hemorrhage or embolus. Those following acute malarial infection are: (1) Periodic amblyopia with visible ophthalmoscopic changes, which quickly subside upon the administration of quinine. (2) Papillar and retinal hyperemia, especially venous, with lessening of the retinal lustre and a tendency to disease of the macula. (3) Large hemorrhages in neighborhood of optic nerve and macula lutea.—*Klin. Monatsblätter f. Augenheilkunde*, July, 1890.

Intraocular Syringing in Cataract Extraction.—During the last five or six years, McKeown, Panas, and a few others, have strongly advocated washing out the anterior chamber after cataract operations, thus removing all cortical remains. DR. J. A. LIPPINCOTT, after two years experience with the method, reports his last 57 operations; the results of which prove that in his hands, at least, it has been successful. He always performs a preliminary iridectomy. The instruments were, after careful cleansing, placed in absolute alcohol for 20 minutes. The eye was thoroughly flushed with a ½ per cent. solution of boric acid, in warm, distilled and filtered water. Cocaine anesthesia was used. The incision with a Graefe's knife was made entirely within the cornea, usually the lower border. The eye was flushed two or three times, at different steps in the operation, with the boric acid solution. The capsule was lacerated by a T-shaped wound, and the lens, after removal of the speculum, pressed out by manipulation through the lids. After a moment's rest, the syringe nozzle was introduced, and the boric acid solution allowed to run in and out, the nozzle meanwhile being moved gently from one end of the incision to the other. In case a mass of cortical substance clung to the edge of the pupil, the nozzle point was pushed on to actual contact. Aided by the continuous flow, it dislodged the mass and drove it out of the chamber. Two or three drachms of the solution generally sufficed; but not infrequently an ounce was used, and in a few cases two ounces. No manipulation of instruments was made on the cornea. The visual results were: $\frac{20}{20}$ or better in 18 cases, $\frac{20}{30}$ in 9, $\frac{20}{40}$ in 9, $\frac{20}{60}$ in 8, $\frac{15}{200}$ to $\frac{20}{80}$ in 8, $\frac{10}{200}$ in 1, and 0 in 1. In 4 cases the lens was almost completely liquid, and in these the final result was good. The syringe used is described by the author, and can be had of Feick Bros., Pittsburg, Pa.—*American Journal of Ophthalmology*, July, 1890.

SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

AND

DERMATOLOGY.

By D. W. MONTGOMERY, M. D., Professor of Pathology, University of California, San Francisco.

Tuberculosis of the Skin.—J. JADASSOHN reports (*Virchow's Archives*, Bd. 121, Hft. 2,) two cases of tuberculosis, or lupus of the skin. The first of these of sound parents, himself in good health, had cut his right index finger while slaughtering cattle. The wound did not heal, but began to enlarge. He came under the author's notice one and a half years afterwards, with an extensive ulceration of the finger; the base of the ulcer was covered with flabby, pale red granulations, with occasional foci of pus. The edges were in some places undermined and irregular, while at other points an attempt at healing was observable. Three more ulcers were found, each about the size of a lentil, lying in a row parallel with the axis of the limb on the upper and inner surface of the forearm. These ulcers were of the same character as that of the index finger. The skin in the neighborhood was brownish red and livid. The ulcers of the forearm began about ten months after the trauma of the finger. On the inner side of and a little below the middle of the upper arm there were also three lesions, two of which were about the same size and in every respect like those of the forearm. The third consisted of two tubercles shining through a dark red colored skin, with the epithelium over them desquamating slightly. The histological analysis confirmed *in toto* the diagnosis; there were foci of granulation tissue with Langham's giant cells, and three tubercle bacilli were found. The patient was a strong young fellow, 20 years of age, with no constitutional disturbance whatever. Jadassohn thinks there can be no doubt that this was a lupus contracted by inoculation in a wound received while killing or dressing a tuberculous cow. The second case was that of a prostitute, aged 30, who never had suffered from any disease but some venereal troubles of little consequence. Neither parents nor relatives were tuberculous, and the patient herself was in excellent health. One and a half years before coming under observation her "lover" had tatooed a garland on the anterior surface of her left forearm. He was then suffering from a severe cough, and died in a hospital half a year after of phthisis. All the tatoo wounds healed kindly excepting on four places, where small crusts formed, under which from time to time a little watery pus would gather and be discharged. These little ulcerations would occasionally heal, and afterwards break out again. On coming under observation there were in all five foci of disease distributed at different points of the garland, into the tatoo wounds, of which the operator had carefully and diligently rubbed his sputum, undoubtedly loaded with tubercle bacilli, as a solvent for the coloring material. This case has the value of a careful inoculation experiment. The ulcers were from the size of a lentil up to that of a silver five-cent piece, of a dark red color, and here and there on the edges was a typical lupus tubercle. The clinical diagnosis of lupus was fully confirmed by the microscopical examination. So we have here a lupus, typical both clinically and microscopically following immediately on an inoculation with tuberculous material in an individual who neither in her family nor herself showed any tendency to nor any other symptoms of tuberculosis. The treatment was in each case thorough extirpation, with the knife carried wide of the diseased areas, and was followed by happy results. [Since the discovery of the tubercle bacillus by R. Koch, and the proof that tuberculosis is undoubtedly an inoculable disease, many affections which a few years ago were thought not to be tuberculous are now known to be caused by the tubercle bacillus. Of course, owing to the fact that we can see it, the variety of tuberculous diseases of the skin is very great. If we could see the lungs during life the number of pulmonary tubercular affections would likely be far greater than it is. One of the fiercest fights has been made against admitting lupus to be a tuberculosis of the skin, and I well remember Kaposi saying in his clinic that if they found tubercle bacilli in lupus it was so much the worse for the bacilli. The line of opponents has gradually been broken, till now there are only a very few who maintain that lupus is a separate disease, and not simply a variety of tuberculosis. Case after case of inoculation of tubercular virus into the skin has been reported, and the similarity in many of these to ordinary lupus has been, to say the least, very striking. One of the hardest tasks has been the demonstration of the bacillus in lupus tissue; and the large amount of damage done and the small number of bacilli present has also been very hard to bring into accord. This, however, is not an exception, for in very chronic tubercular processes, even in the lungs, it is often a very difficult matter to demonstrate the bacilli in the tissues.—D. W. M.]

Inheritance of Hypospadias.—LESSER (*Virchow's Archives*) treated two brothers in whose families quite a number of these cases occurred. Having traced out a family history, he found that in the second and fourth generations eleven such cases appeared, while in the third generation there was no case of hypospadias. In the fifth generation none of the eight male descendants possessed the peculiarity. The fact is remarkable, that while in the second generation, one branch was represented by a woman, the hypospadias was inherited by the fourth and not the third generation of that branch, just exactly the same as where the second generation possessed a male hypospadias representative.—*Centralblatt f. Chirurgie*, August 16, 1890.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

The Effect of Oil and Other Substances on the Secretion of Bile.—DR. ROSENBERG, by establishing biliary fistulæ in dogs, has been able to extend, somewhat, our knowledge of the effects of different foods and drugs on the secretion of bile. It was found that towards the end of the three months during which the experiments continued, the quantity of bile diminished, but its consistency increased, probably through a deficiency of water. When the animals were kept without food the flow of bile increased and decreased at the same periods of the day that it did when they were fed in the ordinary way. During the first hour of digestion the quantity increased, attaining its maximum during the second hour, after which it rapidly decreased, the consistence increasing as the quantity decreased. When fatty or oily substances were ingested, a stimulating action on the secretion was produced, a larger quantity of bile being excreted than when albuminoids or carbo-hydrates were taken, even large quantities of these substances producing far less bile than much smaller quantities of oil and fat. Indeed, these latter bodies possess a higher power stimulating the secretion of bile than any other food or drug, with the single exception of ox-gall, which, when taken by the mouth, increases both the quantity and consistence of the bile excreted. Salicylate of soda increases the quantity but diminishes the consistence of bile. The action of Durand's remedy, turpentine and ether, was found to be entirely due to the turpentine, which has a high stimulating power for the bile-secreting function of the liver. Carlsbad salts were tried both in gelatine capsules and in solution, their effect being to decrease the quantity and increase the consistence.—*Lancet*, July 26, 1890.

Salol in Dysentery.—Salol, in doses of ten grains every three hours, has been highly recommended in the treatment of dysentery. In all probability the benefits following its use are entirely due to its action as a disinfectant, after it has been decomposed by the pancreatic secretion.

Salicylic Acid in Malignant Scarlatina.—It is stated that SHAKOWASKI gave salicylic acid in 125 cases of malignant scarlatina, with a mortality of only 3½ per cent.—*Lancet-Clinic*, August 2, 1890.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

Treatment of Morbus Brightii.—GRAINGER STEWART directed attention (International Medical Congress) to the influence of climate on patients afflicted with this disease, and cautioned against exposure to cold and moisture. He observed two cases of albuminuria develop from residence in a malarial district. Patients afflicted with kidney disease must be warmly dressed. The diet consists essentially of milk and carbohydrates. The addition of lime or seltzer water to milk renders the latter more palatable and prevents the development of digestive disturbances. He does not know of any drug which is curative. In uremia, pilocarpine and hot air baths are indicated; often chloroform and chloral. In increased tension of the pulse, he recommends nitro-glycerine. In the discussion ROSENSTEIN maintained that the essential advances made in treatment, were hygienic and dietetic. No remedy influenced the albuminuria. Complications alone indicated active medication, excitants in cardiac weakness, diaphoretics in hydrops. It must also be remembered, that rest in bed will often cause hydrops to disappear. He warns against the use of calomel, which is with difficulty excreted and readily conduces to gangrene of the mouth. Milk is likely to occasion catarrh of the stomach, and acting too strongly as a diuretic disturbs the patient's night rest. SENATOR spoke of the beneficial effects of iodide of potassium in many forms of nephritis dependent on arterio-sclerosis. AUFRECHT never saw any good effects from this drug.—*Berliner klin. Wochenschr.*, Aug. 11, 1890.

Treatment of Pulmonary Phthisis.—WEBER (London) referred (International Medical Congress) to the drugs at present employed as roborant and symptomatic; he believes that it is possible to find a remedy which will inhibit the propagation of the bacilli without injury to the organism. The chief object attained in our present treatment is the regulation of a phthisical patient's life by hygienic and dietetic means. He considers climate of great importance by its tonic influence on the organs of respiration and circulation. For the cure of many cases, treatment in well regulated institutions is absolutely necessary. The excellent results obtained at Görbersdorf, Falkenstein, and the Adirondack cottages (Saranac lake, New York), were cited in illustration. The institutions for the treatment of phthisis should be located where the air was free from dust and organic impurities, with dry soil and sheltered from winds. LEYDEN (Berlin) spoke of the necessity of public institutions, especially for the poor, in the treatment of phthisis, and he agreed with the former speaker in maintaining that of all the present methods, that, in well regulated institutions was undoubtedly the best. He also dwelt on the great influence of climate in prophylaxis. CANTANI (Naples) observed, that at present we knew of no therapeutic agent in phthisis which was certain in its effects. Plenty of air and food alone yielded satisfactory results. He reviewed his researches on animals experimentally infected with tuberculosis. He showed how over-fed animals lived longer than the under-fed.

Treatment of Non-Purulent Exudative Pleuritis.—In order to prevent differences in pressure attending the removal of pleural exudations, LEWASCHEW, injects after aspiration of a small quantity of fluid, a physiological solution of salt into the pleural cavity until it has entirely replaced the exudation. The salt solution is then rapidly absorbed.—*Berliner klin. Wochenschr.*, August 11, 1890.

Treatment of Enuresis Nocturna.—VAN TIENHOVEN recommends on theoretical grounds, that children suffering from this affection should be made to sleep with the pelvis well raised. He reports a number of cases in practice where this procedure was attended with the most successful results.—*Berliner klin. Wochenschr.*, August 11, 1890.

The Phenomenon of Bacelli.—RUMMO demonstrated the real value of this sign by chemical and experimental investigations. He showed that the "whispered voice" was only heard in auscultation of the abdominal wall, when the exudation in the pleural cavity was serous in character. —*Berliner klin. Wochenschr.*, August 11, 1890.

The Absence in the Urine of Casts in Nephritis.—Physicians have often noted the occasional absence in the urine of casts in nephritis, notwithstanding the existence of pronounced albuminuria. DR. ERNST SCHRWALD in an exhaustive article on this interesting subject (*Deutsche med. Wochenschrft*, June 12, 1890) formulates the following conclusions: (1) In typical nephritis there are days when casts cannot be demonstrated in the urine, notwithstanding that on other days their presence may be shown in abundance. This occurs without material variations in the excretion of albumin. (2) Hourly examinations of the urine on the same day show decided differences in the number of casts, although the percentage of albumin is about the same. (3) The portions of the urine poor in casts show instead large quantities of granules and free nuclei. In such portions the casts are paler and narrower than in those containing many casts. (4) The increased presence of detritus (granules) when the urine is poor in casts shows that the latter have been redissolved. (5) The disintegration of the casts is not ascribable to any simple chemical solution, as the normal constituents of acid urine would tend to precipitate albuminoid bodies. Microörganisms of decomposition are also not involved in the change, because in fresh urine free from bacteria, this disintegration is also observed. (6) The casts are dissolved by the presence of pepsin in acid urine. An increase of pepsin is always accompanied by a decrease in the number of casts. (7) The longer the urine is allowed to remain in the bladder, or allowed to sediment at high temperatures, the greater the diminution in the number of casts. (8) A practical recommendation is, to allow the urine to sediment for a short time only at a low temperature and to select portions which have remained in the bladder for a limited period. (9) This peptic digestion can begin in the kidneys as well as the bladder and facilitate the excretion in the former situation of casts which have become fixed. [Pepsin according to recent observers is almost a constant constituent of urine. Its quantity is dependent on the condition of gastric digestion and the quality and quantity of food ingested. That the urine is capable of digesting albuminoids has been satisfactorily determined by Schrwald. —A. A.]

The Treatment of Diabetes Mellitus.—DR. JAQUES MEYER concludes a contribution on this subject as follows: (1) The amount of sugar excreted is no absolute guide to the severity and course of the disease. (2) The affections of the heart bear an etiological relation to the diabetic processes and must receive consideration in the treatment of this affection. (3) An absolute meat diet in the dietetic treatment of diabetes is not to be recommended. Fats and a moderate quantity of carbo-hydrates must be combined with a meat diet. (4) Hunger must not be satiated by large meals, but rather by frequently repeated light meals. (5) Ministering to the mind is an essential factor in the treatment of diabetes. (6) Diabetes can only be looked upon as a relatively curable disease.—*Deutsche med. Wochenchr.*, June 5, 1890.

DR. F. W. PAVY in an article upon this subject read at the recent meeting of the British Medical Association, maintains "that the first consideration in the treatment is to control by dietetic measures the passage of sugar through the system. The real point, however, to be aimed at, is to restore the assimilative power over the carbo-hydrate elements of food, and until this has been accomplished, it cannot be said that a cure has been effected, but only that the disease is held in subjection, and prevented as long as the condition can be maintained, from leading into an unfavorable issue. What most conduces to the desired restoration of assimilative power, is the maintenance of a normal state of the system by keeping it free from the passage of sugar through it, and in this way bringing a healthy condition of body to bear in helping to promote a removal of the faulty state." According to his experience, opium and its derivatives, codeine and morphine, are the medicinal agents which, more than any others, assist in the actual cure of the disease, by which he means, a restoration of the assimilative power which has been impaired. The influence of these agents may be observed, when by diet, the sugar has been brought down to a certain point, but is unsusceptible of entire removal from the system by dietetic treatment alone. The complete removal may then be sometimes observed to follow the subsequent administration of the drug, showing that the medicinal agent has acted in the direction of exerting a restraining influence over the abnormal production and elimination of sugar.—*Boston Medical and Surgical Journal*, September 4, 1890.

The Action of the Positive Pole of the Constant Current on Micro-organisms.—In the year 1888, APOSTOLI and LAQUERRIÈRE referred to the antiseptic action of the constant current. During the last two years they have conducted more careful investigations, with the following results: If both poles of the constant current are introduced into a test tube, containing a "bacillary culture," vertically, and 3 cm. apart, and with the culture so treated inoculations are made on culture media and likewise on rabbits and guinea pigs. (1) The action of the constant galvanic current will be in direct proportion to its intensity. (2) The intensity and not duration of action (*ceteris paribus*) is of importance. (3) A current of 300 M. A. or more, of 5 minutes' duration sterilizes cultures of anthrax bacilli, making subsequent inoculations inocuous. (4) A current of from 200 to 250 M. A. does not, with certainty, inhibit the virulence of the culture. A few guinea pigs died after inoculation, although later than control animals, inoculated with a culture not acted upon by electricity. (5) A current of 100 M. A. or less, does not destroy the virulence of the culture even after 30 minutes' duration; only a diminution of the culture was noted, inoculated guinea pigs dying one or two days later than control animals They also determined that these results were independent of any thermic action accompanying the electrolysis. Studying further the action of the individual poles, the following conclusions were attained: (1) Even when thermal action was excluded, the virulence of bacteria is diminished or destroyed. (2) The *positive pole* alone is capable of action. (3) By the unipolar application a diminished intensity of the current is necessary; a current of 50 M. A. suffices to diminish, and 100 to 150 M. A. destroys the virulence of the microbes. (4) With the "medicinal" current doses of from 50 to 300 M. A. no specific influence on the cultures is secured, but is due more to the development of acids and oxygen at the positive pole.—*Berliner klin. Wochenschrift*, June 2, 1890.

Experimental Studies in Tuberculosis.—At the Heidelberg Congress of German Naturalists and Physicians, SCHOTTELIUS stated that he conducted a series of experiments with tuberculous lungs interred in a wooden box at a depth of five feet, the usual mode of sepulture of bodies. Two years and a half after, he removed from the earth a quantity of tuberculous bacilli, for the most part spore producing. From this material pure cultures were obtained, which furnished positive results in 80 per cent. of his experiments in inoculation. Gartner has observed bacilli in a cemetery abandoned for 25 years. As a practical outcome of his investigations, Schottelius advises the disinfection of bodies of persons dying from infectious diseases. Gebhardt tested the virulence of sputum from consumptives in different grades of dilution, with a view of determining whether the potentiality of the tuberculous virus is essentially modified by the organ first infected—that is to say, by the manner of infection. He employed hypodermic and intraperitoneal inoculation, and experiments in inhalation and alimentation, and ascertained that the subcutaneous connective tissue, the peritoneum, and the lungs are inclined to receive and multiply the tuberculous virus in about an equal degree, while the digestive apparatus offers resistance. Hence tubercular virus may, especially in small quantities, pass through certain organs without provoking local alterations. As the point of ingress is not always the seat of the disease, pulmonary tuberculosis is not always to be attributed to infection by inhalation. Sputum which contains bacilli is enormously infectious, retaining its virulence even in dilution of 1:100,000, apparently without regard to the manner of infection. The virulence of the sputum being in proportion to the quantity of bacilli present. Malassey and Vignal desiccated the sputum of tuberculosis, moistened it with water, again desiccated and pulverized it, and this repeatedly, endeavoring to realize, as far as possible, the conditions to which the sputum daily ejected in our streets is subjected. After successive desiccation and moistening, the bacillus of the sputum retained all its virulence. Regarding the penetration of bacilli tuberculosis into the organism. Dobroklonski shows, that tuberculosis may attack the system by way of the digestive apparatus. For this infection to occur, no lesion of the intestinal wall of any description, is necessary. The bacilli and spores of tuberculosis may easily traverse the completely normal epithelial lining of the intestine, but do not determine an inflammation unless remaining for a length of time in contact with the intestinal wall. As a natural inference from Hirschberger's experiments demonstrating that tuberculous cows, produce in 55 per cent. of cases, infectious milk, it was supposed that milk from large dairies would contract virulent properties from the infectious milk of one tuberculous cow. A series of experiments by Gebhardt show that tuberculous milk loses its virulence at a certain dilution. Milk served by large dairies is always to be preferred to the continued use of milk from the same cow. The attention of sanitarians was directed to the derivative of milk. Gasparini inoculated guinea pigs with butter containing the bacilli of tuberculosis, and verified tubercular lesions in almost all cases. Kastner, referring to the infectious property in the flesh of tuberculous animals and its danger to man, concludes that the danger is slight, unless the nodules of tuberculosis are found in the meat, which is rarely the case.—*Rivista Internazionale d'Igiene.—Boston Medical and Surgical Journal*, June 26, 1890.

A Simple Test for Sugar.—DR. V. BECKER has discovered that our visiting cards contain a considerable quantity of potash, a fact which is utilized as follows: the cards are immersed in a solution of copper sulphate and dried. Thus prepared they can be conveniently carried. With a match dipped in the urine supposed to contain sugar, two or three lines are made on the prepared card, which is then exposed to heat, when, if sugar is present, the lines become brown, the intensity of coloration depending of course on the amount of sugar. Normal urine will not yield the same results. In making the test for sugar, it is recommended to compare the results with normal urine.—*Muenchener med. Wochenschrift*, July 1, 1890.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

A Medico-Legal Case.—MR. HENRY A. RILEY has called attention to a case lately decided by the New York Court of Appeals, the circumstances of which have been stated by the judges to be without a parallel in legal history. In 1880, Francis R. Palmer made a will in which small legacies were given to his two daughters, while the balance of the estate was to go to his grandson, Elmer E. Palmer, the only restriction being that his wife should have her support from the estate. The grandson, Elmer E. Palmer, knew the provisions of the will, and in 1882, in order to prevent any possible revocation which might be unfavorable to him, poisoned his grandfather. The boy was sixteen years old, and was put on trial for the crime and convicted of murder in the second degree. He was sentenced to the State Reformatory and was serving out his sentence, when the action was brought to determine whether he could hold the property. The statute clearly states that a properly executed will can only be revoked by the intelligent act of the testator. The will was conceded to be valid in all respects and had not been revoked by the testator at the time of his death. The Legislature of the State, not contemplating such peculiar circumstances as the above, did not place exceptions in the statute to cover the case, and the question was therefore, whether the plain provisions of the law could be set aside in this case. The Court reasoned as follows: "There was no certainty that this murderer would survive the testator, or that the testator would not change his will, and there was no certainty that he would get this property if nature was allowed to take its course. He therefore murdered the testator expressly to vest himself with an estate. Under such circumstances, what law, human or divine, will allow him to take the estate and enjoy the fruits of his crime? The will spoke and became operative at the death of the testator. He caused that death, and thus by his crime made it speak and have operation. Shall it speak and operate in his favor? If he had met the testator and taken his property by force, he would have had no title to it. Shall he acquire title by murdering him? If he had gone to the testator's house and by force compelled him, or by fraud, or undue influence, had induced him to will him his property, the law would not allow him to hold it. But can he give effect and operation to a will by murder and yet take property? To answer these questions in the affirmative, it seems to one, would be a reproach to the jurisprudence of our State, and an offense against public feeling.'' The Civil Law and the Code Napoleon expressly provides that one cannot inherit property from a person whom he has murdered, and where these laws prevail it has, therefore, not been thought necessary to enact a law on the subject. This fact required the Court to fall back on the natural principles of justice. Two out of the seven judges of the Court of Appeals, dissented from the opinion of the others, being disinclined to countenance Court-made law, although they recognized the enormity of the crime perpetrated by young Palmer.—*Medical Record*, July 19, 1890.

Aphasia and Insanity.—PROF. WERNICKE reports the case of a man, aged 48 years, who had been insane, and after recovering from the psychosis presented the following symptoms: Complete muteness, inability to voluntarily perform the expiratory act, and to suck with the mouth, immobility of the tongue when subjected to the will, the act of mastication and deglutition being intact. Ability to read and write was present with the exception of certain disturbances, which reminded one of paraphasia, but which did not interfere with understanding. Wernicke considers the case according to the present accepted theory of aphasia, and calls attention to its resemblance superficially to the clinical picture of subcortical motor aphasia. Different objections which could be raised to this view force one, however, to accept a special form of transcortical motor aphasia; thus, particularly its mode of origin from a mental disease. Wernicke defines mental diseases in general as within the scope of transcortical diseases, and he has tried to explain by diagram how various forms of transcortical aphasia may develop from a psychosis. One of these forms must be assumed to be present in the foregoing case. The other motor disturbances are in the same way to be considered transcortical paralyses. The muteness was preceded by long periods of mutacism and verbigeration, well-known disturbances in the symptomatology of mental diseases, which in connection with this theory present themselves in a new light.—*Centralblatt f. klin. Medicin*, July 5, 1890.

Post-epileptic Unconscious Automatic Action.—Under this head DR. WALTER S. COLMAN considers some special variations of the third stage of the typical epileptic fit, in which the convulsion has ceased, but consciousness not been restored. This stage may last from a few seconds to many hours, and on recovering consciousness the patient has not the slightest recollection of what he may have been doing. Dr. Hughlings Jackson regards this condition as analogous to the paralysis of the affected limb often seen after epileptiform attacks. He thinks there is exhaustion of the "highest" centres in the brain, and that in consequence the normal control is taken off the lower centres. These automatic actions may occur not only after severe epileptic fits, but quite as frequently after minor seizures (petit mal), in which there may be nothing about the patient to attract the notice of anyone, when he suddenly loses consciousness, but does not fall, and immediately performs acts which are without reason, often grotesque, and not infrequently criminal. This is well illustrated by the following case: A clerk, in London, who had been treated for some years for epilepsy and petit mal, but who had never previously performed any automatic acts, was one day sent to a merchant's office, where he had never been before. Shortly after entering he recollects experiencing his usual aura of an attack of petit mal, but remembers nothing further. It appears that he then pushed the merchant out of his chair and sat down in it himself, displaced all the papers on the desk as if searching for something, got up without taking any of the papers, and abruptly left. Passing safely through the crowded streets to his own office, he there recovered consciousness. He had afterwards the greatest difficulty in persuading the merchant that he had acted unconsciously. Had he taken any paper of value, his story would most certainly have been disbelieved, and he probably would have been unable to clear himself from a charge of wilful theft. Dr. Colman roughly divides these automatic actions into groups: (1) Such as consist in the patient merely talking or repeating some word or phrase. A boy who had frequent fits used to repeat "forty, market, corner, book," over and over again for about a minute after each seizure. The cases described in France as "arithmomaniacs" are epileptics of weak intellect, who occupy themselves habitually with simple arithmetical calculations. (2) The actions may resemble those performed in a somnambulistic state. One such patient used to get up after each nocturnal fit, put on his clothes and return to bed with them on. If he did not find his own clothes, he put on those of his wife. In other cases (frequently spoken of as "procursive epilepsy") the patient, at the close of the fit, suddenly springs to his feet and runs about at full speed, avoiding all obstacles. (3) Actions apparently suggested by a feeling of malaise. This is the explanation first given by Gowers, of those cases in which at the close of a fit the patient commences to undress himself, a proceeding which has given rise to unjust charges of indecent exposure. (4) The actions may be those of a kleptomaniac. In performing such actions the epileptic patients seem to be guided by the proximity of the objects and not by their intrinsic value. A patient who had been epileptic for some years had an attack of petit mal in a hardware store. He placed a large coal-scuttle on each arm, and deliberately walked out of the shop with them. (5) The actions may be acts of violence. Such occurences are frequent among epileptics in insane asylums and are often the cause of their being placed under restraint. In a case observed by the author, a youth aged 18, attempted several times to mutilate his genital organs after an epileptic fit, and once he almost succeeded in doing the same to a younger brother. He was in consequence removed to an asylum. (6) Cases in which the patients deliberately micturate, occurring as an apparently purposive act after an attack. Thus Troussean mentions a magistrate who on one occasion was observed to leave his chair and go into the council chamber, micturate in the corner of it, and then return to his own seat without being at all aware of the action. The foregoing cases serve to illustrate the kind of action which may occur in the post-epileptic state. The frequency with which such phenomena follow attacks of petit mal, impresses the necessity of exercising great caution when called upon to give evidence in the Courts as to the responsibility of a person for acts of this description.—*Lancet*, July 5, 1890.

The Etiology of Hysteria.—According to DR. H. OPPENHEIM, the symptoms of this disease are as real as those of typhoid fever, pneumonia, etc, notwithstanding the fact, that even the most careful microscopic investigations do not find an anatomical substratum. After briefly referring to the exploded theory which ascribed the origin of hysteria to affections of the genitals or to involvment of the nerves governing the circulatory apparatus, he mentions the recently formulated hypotheses: that the symptoms of hysteria are ideogenic in their nature. Charcot, who vigorously defends this hypothesis, sought by experiment to induce in hypnotized subjects all the manifestations of hysteria. Oppenheim then presents his own hypothesis which is: that the essential condition in hysteria, is what he calls "irritable weakness," *i. e.*, abnormal irritability, with exhaustion. This condition controls the functions of the nervous system and as a result, irritation of internal as well as external origin, causes the motor, sensory and secretory functions to react readily and to an exaggerated extent. He then seeks by analogy to show, that the symptoms of hysteria are only physiological exaggerations; *e. g.*, a slight irritation of the skin increases the frequency of the pulse, or an irritation not even reaching consciousness in a normal individual, will at once reproduce many of the symptoms peculiar to hysteria.—*Berliner klin. Wochenschrift*, June 23, 1890.

The Medico-legal Relations of Paralysis from Brain Disease.—DR. DANIEL R. BROWER calls attention to a late decision of the Supreme Court of Illinois, in a case where a gentleman 80 years old, possessed of considerable property, had disinherited his wife and daughter to whom he had always been most affectionately attached, a short time after he had been stricken with paralysis. The patient was at the time of the attack rendered quite, if not wholly unconscious, and remained helpless with one side completely paralyzed and his powers of speech irrevocably lost. In this condition he made his will three months subsequent to the apoplexy, bequeathing all his property to his three brothers, already comfortably well off, and with whom he had for years had very little if any intercourse, and that of not a very amicable nature, thus cutting off his natural heirs as far as possible, with whom his relations before and during the paralysis had always been of a most agreeable kind. Whether this breach was committed while the testator was in a condition of disordered affections, changing his natural and reasonable relations to wife and daughter, and making unnatural his relations to his brothers, or whether he at the time was unable to convert his ideas into proper language, and signed the paper without correctly understanding its contents, is of course mere conjecture. The opinion was given by Dr. Brower that the will should not stand, that it should be set aside on the ground that this paralysis from brain disease, the result of cerebral hemorrhage, had disturbed his mental condition to such an extent as to make it impossible for him to rightly understand the relations he bore to his family, and to properly convey in language the ideas that originated in his brain. The profound disturbance attending paralysis of cerebral origin and the intimate relation of the psycho-motor centres to the emotional and intellectual centres should, in the opinion of the author, raise a presumption of mental impairment, which may be of such a kind and degree as to vitiate a contract or make null and void a will. However, as the cases progress, the mental equilibrium may be restored even though the paralysis does not improve. In the case before us the will was set aside by the lower Court, the higher Court, however, reversing the decision. In two other cases the Supreme Court of Illinois has, in citing and approving this decision, expressed that cerebral paralysis does not raise a presumption of mental impairment. The legal responsibility in any case of cerebral paralysis should be judged by its merit, and if the will or contract in question is not clearly reasonable, the burden of proof should be with the defendant. He should be required to show that the patient was not of unsound mind at the time of making the contract or will.—*Journal American Medical Association*, June 7, 1890.

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., Sacramento, Cal.

Mortality.—The deaths registered in 98 town districts of the State during the past month, in a population of 802,150, correspond to an annual rate of 15.84 a thousand, the total mortality having been 1,065. 183 deaths were due to zymotic diseases, giving an annual rate of 2.73 a thousand. Of these 28 were due to typhoid fever, 76 to cholera infantum, 25 to diarrhea and dysentery, 10 to cerebro-spinal fever, and 3 to whooping cough. 238 deaths resulted from diseases of the respiratory organs, giving an annual rate of 3.52. Of these 157 were due to consumption, 41 to pneumonia, 29 to bronchitis, and 11 to pulmonary congestion; the rate being for consumption and pneumonia, 2.34 and .612, respectively. The average annual death rate from all causes, occurring in the ten largest cities and towns in the State, and representing a population of 570,250, was 17.28. The highest rate for the month, occurring in cities having a population of 10,000 or more inhabitants, was reported from San Jose, the lowest from Fresno.

METEOROLOGY.

By J. W. ROBERTSON, B.A., M. D., San Francisco, Cal.

Summary for August.—Both in the valley and mountain belt the temperature for August was above normal, all stations reporting high temperatures, a few only going above 100°. Along the coast there is a marked difference, but seldom varying from the mean of 60°.

Rainfall.—August was characterized by an absence of all rainfall in that region north of Tehachapai Pass. While it is one of the dry months which characterize the California summer, it seldom happens that over such a large extent of territory an occasional storm does not break, or at least a well marked trace. South of Tehachapai there was an abnormal rainfall, there being several storms characterized by electrical disturbances.

California—Tabular Statement for August, 1890.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	69.6	102.0	47.0	93.5	54.2	39 3	0	.00	-------	----	----	----	-----	Placer *Republican.*
Berkeley......... "	60.4	83.0	52.0	71.3	54.7	16 6	0	0.00	83.2	13	2	14*	SW & W	Obs. Univ. of Cal.
Colfax........... "	75 5	98.0	58.0	-------	-------	-------	0	0.00	-------	----	----	----	SW.	Southern Pacific Co
Eureka.......... "	55.8	65.0	45.0	60.1	51.5	8.6	2	0 02	91.2	5	12	14*	NW.	Signal Service U.S.A.
Fresno.......... "	80.9	105.0	56.0	97 8	63.9	33.9	0	T.	38.4	27	4	0	NW.	" " "
Keeler. .... "	80.1	98.0	59.0	91.5	68.7	22.7	4	1.71	34.6	20	9	2	E.	" " "
Los Angeles.... "	72.8	98.0	56.0	83.7	62.0	21.7	1	0.03	72.6	10	20	1	W.	" " "
Monterey .... "	61.0	86.0	50.0	-------	-------	-------	0	00	-------	----	----	----	S.	Southern Pacific Co.
Napa........... "	63.1	86.0	47.0	73.8	52.4	21.4	0	.00	-------	12	19	0	S.	Sta. Napa Ins. Asylum
Oakland .... "	60.7	89.0	50.0	-------	-------	17.7	0	.00	75.5	13	12	6*	W.	J. B. Trembley, M.D.
Paso Robles.... "	70.3	99.0	52.0	-------	-------	-------	0	.00	-------	----	----	----	S.	Southern Pacific Co.
Red Bluff....... "	84.7	104.0	54.0	94.9	64.5	30.3	0	0.00	41.4	28	3	0	S.E.	Signal Service U.S.A.
Sacramento. ... "	72.8	96.5	51.0	87.4	58.2	29.3	0	0.00	61.3	29	2	0	S.	" " "
San Diego....... "	73.5	89.0	58.0	75.4	64.2	11.2	0	T.	76.3	14	7	10*	W.	" " "
San Francisco.. "	61.4	85.0	50.0	68.4	54.3	14.1	0	0.00	82.6	12	17	2*	W.	" " "
Santa Barbara.. "	67.9	98.0	52.5	72 5	55.5	17.0	0	.00	75.0	19	7	5*	W.	Hugh D. Vail.
Santa Cruz...... "	68 3	92.0	52 0	-------	-------	-------	0	.00	-------	----	----	----	S.E.	Southern Pacific Co.
Yuma..........A. T.	89.0	110.0	68 0	101.5	76.8	24.7	8	0.83	51.0	15	16	0	S.	Signal Service U.S.A.

Blank (----) indicates data missing. * Fog.

Occidental Medical Times.

JAMES H. PARKINSON, L. R. C. S. I., EDITOR.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: OCTOBER, 1890.

FOREIGN SCHOOLS VERSUS AMERICAN PHYSICIANS.

Receipt of a pamphlet bearing the above inscription is hereby acknowledged. As its anonymous author doubtless profoundly desires the widest possible dissemination of his views, they will be presented in brief, primarily for the instruction, and incidentally for the delectation of the medical public.

The points of the paper are as follows: (1) All foreign governments require a State examination of every physician before permitting him to practise within their jurisdiction. (2) This provision is (*a*) "just," "wise," "wholesome," beyond question; (*b*) an "invidious discrimination" against "American physicians;" (*c*) an "arrogant pretense of superiority;" (*d*) "really" an application of the "principle of protection;" (*e*) a gratuitous insult by arrogant and presumptuous rivals. (3) When American physicians understand it, they will adopt it themselves. (4) The medical exotic comes into an American village, allows it to transpire that a foreign diploma is the only genuine one, that American doctors are mere pretenders and, as the "Original Jacobs," he captures the community. (5) If this is not stopped, American physicians will be "driven to the wall." (6) The author thanks God that he is American by birth and American by education. (7) He asserts his personal responsibility for his language, of which, however, a Court of Lunacy would probably acquit him.

Before proceeding further, let us assure the reader as well as the anonymous author, that the writer of this article is also an American, neither "proud," however, nor ashamed of a mere accident of birth, and in consequence a possible misfortune of education, that he is a graduate of an American school, and never has seen a foreign one, but that he recognizes the old trick of thanking God that one is not as other men are. We protest, moreover, against general and gratuitous insult of foreign physicians, and are positive that such tirades as the one in question do not reflect the sentiment of American medical men. We are positive of this because American medical men, as a rule, are men of culture, recognizing with Jaccoud that the great temple of medicine is built of brick, and cemented with mortar from every age and every land; because American medical men know that the protection imperatively demanded in this country and in every other, is rather of the people than of the profession; that, to secure this protection, we must first arrest the graduation from two-term schools of so-called doctors, in blocks of a hundred, who go forth as American physicians to verify the definition of Voltaire, "a physician is a man who pours drugs, of which he knows little, into bodies of which he knows less," and to realize the fearful indictment of Faust:

> These hills and peaceful vales among
> We raged more fiercely than the pest.

The protection so much needed, then, is first of the people and later of the physician. In truth protection of the people will result in the chief if not the only protection to which the medical profession is entitled. This protection assuredly should not be against competition with qualified medical men of whatever race or nationality. Medical education in America during the decade just drawing to a close, has made marked, even satisfactory progress. It gives promise of doing as well in the decade to come. Many of our medical schools are of the first order, many more are struggling to become so, a few only lag disgracefully behind, enemies alike of the profession and of mankind. Medicine hitherto, in America, has been envisaged as an art, it is now assuming more and more the aspect of a science. In Europe the opposite tendency is discernible. In comparing foreign schools with our own, it may be said by way of epigram, the typical European school aims to produce a *savant,* in which it frequently fails, the typical American school to produce a practical physician, in which it often succeeds. In the near future, let us hope, these aberrations from a just ideal will be corrected and the physician of to-morrow, both learned and practical, theorist as well as artist, shall be doubly equipped for the battle with dissolution.

Mr. Lowell has observed, and who has not? what he describes as "a certain condescension in foreigners." Foreign physicians and foreign medical schools are no doubt infected with it. But European condescension is abundantly and perhaps rightfully offset by American Jingoism. Men of culture, which all physicians should be, can well afford to be indifferent to these weaknesses, if they do not find them amusing.

NOTES.

Cirrhosis of the Liver in Childhood.

This exceedingly rare disease has been treated in a very exhaustive manner by Dr. Wm. A. Edwards, in a recent issue of the *Archives of Pediatrics*. He has tabulated 100 cases collected from the literature on the subject, including a case of his own, which he has had under observation for a prolonged period. The forms of this disease may be either the atrophic or the hypertrophic, though not unusually the mixed variety is met with. The infrequency of the disease may be inferred from the fact that West found but 4 cases in 70,000, and Henoch had never seen a fully developed case. On the other hand, Eustace Smith believes that, though not common, it cannot be said to be very rare. Alcohol has not the same relation to the disease, as in the adult, its habitual use being mentioned in the table only 11 times. Tuberculosis may cause it, but the infectious fevers appear to be the most important causative agent. Prognosis and treatment are similar to that in the adult, though recent reports seem to show that the disease is not so hopeless as has been supposed.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, July 22, 1890.

The President, THOS. W. HUNTINGTON, M. D., in the Chair.

Sacramento County Hospital.—The report of the Committee on County Hospital was of considerable length. The hospital is situated outside the city limits, about 3½ miles from the river, on the county farm, comprising 60 acres of garden, orchard, vineyard and pasture land. It is built on the pavilion plan, the central or executive block having three stories. The wings, 5 in number, radiate from the central building like the leaves of a fan, being connected thereto by covered porches. Each wing is two stories in height, 24x90 feet in length, divided into two wards, with a capacity of 22 beds per ward. Ten feet of the rear of each ward is cut off for water closets and lavatories; in the latter are two bath tubs supplied with an abundance of hot and cold water. The wards are heated by stoves and ventilated by the Cottier plan. The water supply is excellent and is obtained from a well, being raised 75 feet to a tank in order to obtain the necessary pressure. The system of sewerage in use is the Shone ejector. The cost of maintenance, including subsistence and salaries, but without permanent repairs, is about 50 cents per capita; the appropriations made by the Board of Supervisors have always been ample for the purpose. Owing to the handsome site and abundance of shade trees, the institution presents an unusually attractive appearance.

The Doctor in California Politics.—DR. G. L. SIMMONS read a paper upon this subject. He reviewed at length the question of medical legislation, entering into the history of former and existing enactments, and discussed their bearing upon medical education, the condition of the profession and the repression of quackery. In general terms he was opposed to all so-called medical legislation and had never advocated any of the measures that had been passed. The Sacramento Society had always expressed itself as against medical legislation in former years. The only enactment that he would favor would be a simple one requiring a similar standard of qualification to that demanded by the National government for employment in its service

A long and earnest discussion ensued, participated in by all the members present, as well as by Drs. Lawhead, of Woodland, and Bates, of Davisville, from the Yolo County Medical Society. The sentiment of the majority was opposed to any measure, though favoring the proposed law as possessing some excellent features.

Regular Meeting, August 18, 1890.

The President, T. W. HUNTINGTON, in the Chair.

Gall-Stones.—DR. W. R. CLUNESS exhibited some gall-stones of unusual size that had been removed, *post-mortem*, by Dr. Lawhead, of Woodland. The calculi were irregular in shape and facetted, the largest measuring 1⅛ in. in its greatest diameter and weighing 113 grs.

DR. G. L. SIMMONS, JR. read a paper upon "Rare Sequelæ in Acute Gonorrhea."

DR. J. R. LAINE had had one case of fistula two years ago, following gonorrhea. The urine did not pass through the fistula, but there was extensive edema of the scrotum and penis.

DR. F. B. SUTLIFF had seen the case mentioned by the author. It was a very interesting one. Owing to the nervousness of the patient an examination was very difficult, but he believed that the fistula opened into the rectum.

DR. W. R. CLUNESS had never seen a case similar to that mentioned by the author. He had frequently met with fistula behind the glans penis. In his opinion, cystitis resulting from gonorrhea was a very rare occurrence.

DR. J. A. MCKEE had seen cases similar to those mentioned by Dr. Cluness. He had recently had a case of abscess of the prostate closely following acute gonorrhea.

THE PRESIDENT had hoped that the discussion would have taken a wider range. He wished to report a case which he regarded as one of *Gonorrheal Rheumatism.* A young man, 25 years of age, had gonorrhea in February, 1889. The attack was mild and yielded readily to a patent injection, used only for one week. On March 11th, he entered the Southern Pacific Company's Hospital, suffering from severe pain in left forearm, wrist, hand and fingers. Some ten days before entrance he had slipped in getting off a moving train and slightly wrenched the same wrist and hand. Did not regard the injury as serious and continued his work as a switchman during that day and most of the following, when he was obliged to desist on account of pain. The parts rapidly became inflamed, tender and painful. No suspicion being excited as to the probable real cause of the affection, the treatment for the first few days was hot applications of acetate of lead and opium lotions locally, and with a view to possible rheumatic complication salicylate of soda was given freely internally. This course was persisted in for about ten days without the slightest relief. In fact the severity of all the symptoms perceptibly increased. About this time attention was called to the recent attack of gonorrhea, and as in other respects the symptoms were closely in line with gonorrheal rheumatism, treatment was ordered with reference to that condition. The forearm and hand were repeatedly blistered, each time with marked benefit. Hot applications were abandoned and a dry bandage was applied snugly. Internally the treatment consisted of potassium iodide, iron, quinine, and vegetable tonics. The bowels were kept freely open with saline laxatives. A liberal diet was also prescribed. Improvement was constant, but very slow. The infiltration about the joints involved, and within the sheaths of tendons persisted wonderfully, and even after three months of constant attention there remained. considerable impairment of function. The patient was discharged early in June. The case is of some interest, in that the diagnosis must remain in a measure obscure. The history of the gonorrheal attack is certainly peculiar. We are all aware that specific gonorrhea is almost invariably of longer duration than observed in this instance. Yet the conditions present were of so grave a nature and so widely at variance with those attendant upon a slight injury, that I was led to believe that the attack must have been due to the presence of specific virus.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, August 12, 1890.

The President, J. F. MORSE, M. D., in the Chair.

Honorary Member.—A. B. ARNOLD, M. D., was duly elected an honorary member of the Society.

Dosimetry.—DR. F. A. BELLINGE presented a further report on dosimetry, and replied to some objections made to the method. He said the tendency of the medical mind was towards the study of the causes and pathology of diseases, to the neglect of therapeutics. Great stress was laid on pathological anatomy, but therapeutics, the key of medicine, was neglected. The true foundation for sound therapeutics was, according to the recent writings of Claude Bernard, physiological experimentation, coupled with clinical observations, and such was the basis of the dosimetric method. Science was much indebted to Prof. Burggraeve for his untiring efforts in the extrication of therapeutics from its chaotic state, the formulation of a precise rule of treatment in disease and in familiarizing the use of the alkaloids. Dr. Bellinge reviewed some of the objections presented against the dosimetric method when he read his first paper. In answer to the criticism that dosimetry was empirical in not requiring diagnosis before commencing treatment, he said that the objector was laboring under a misunderstanding, as diagnosis could not be ignored, being an essential science in practice. But diagnosis being uncertain and subject to errors of judgment, dosimetric practice showed that by treating disturbances in their dynamic stage before a complete diagnosis could be made, and restoring normal equilibrium by the dosimetric use of the vital modifiers, the alkaloids, the dangers from errors of diagnosis were removed, as there were then no organic lesions to make out and combat. The organistic school taught that there were no therapeutical indications until an organic change could be diagnosed, but the dosimetric school taught that such a course was erroneous and increased the difficulties and perplexities of treatment. By following the dosimetric rule not to wait for the evolution of diseases but to jugulate them in their dynamic period, the physician could best fulfil his mission to "cure and cure quickly." The statement had been made that sometimes the alkaloids were less potent for good than the crude drugs. Dr. Bellinge took decided exception to such an assertion. We could not compare them; on one side, we had in the alkaloids sure and pure agents of exact composition and certain activity, while on the other, the crude drugs were uncertain in action, complex in composition, various and sometimes dangerous. The balance was decidedly in favor of the alkaloids. The writer said that dosimetry did not pose as a new system of medicine, and offered no unreasonable opposition to regular and well established principles of medicine, but did declare war on the uncertain, incongruous and nauseating preparations of pharmacy, and denounced the frauds of unscrupulous pharmacists. The dosimetric school had removed much of the terror which physicians felt towards the alkaloids, and shown that we had in them true arms of precision, and that they were perfectly innocuous when used dosimetrically. To the point raised that dosimetry was a medicine of symptoms and a retrogression, Dr. Bellinge replied that it was sufficient only to state the distinction made in dosimetric practice between the *dominant* and *variant* treatment to overthrow the objection. Disease is a complex gathering of symptoms which should be carefully analyzed so as to arrive at the full knowledge of cause and effect. Symptoms should not be considered abstractively, but referred back to their cause and seat. Dosimetry reasons out symptoms and must not be confounded with empiricism, which attacks them blindly.

Dr. W. F. McNutt did not see so much new in dosimetry as he expected, certainly not enough to constitute it a new method in therapeutics. He was not aware that physicians were in the habit of waiting until morbid anatomical changes had taken place before commencing the treatment of preliminary symptoms, such as fever and other constitutional conditions, which precede the anatomical changes. Alkaloids were preferred by most men as being more accurate, but it could not be denied that in many instances the crude drug, such as opium, was more useful. Another idea of dosimetry was to attack the disease itself, while he believed that better results could be obtained by taking care of the patient. The best feature of dosimetry was that it reiterated the advantages of simplicity in prescribing.

Dr. C. G. Kenyon said that so far as the habits of physicians were concerned in the early treatment of disease, dosimetry begged the question, and while the alkaloids might be more exclusively used, he could not consent to the proposition that prescribing one drug at a time was invariably the best practice. There were many instances in which it was absolutely necessary to give more than one medicament; certainly they might be put up as separate remedies, but both would be used by the same patient.

Dr. H. Kreutzmann said that he had been taught to use as nearly as possible one medicament at a time, and if possible to use the active principles, but he was not aware that such instruction originated with the dosimetric method; neither could he see the parallel between dosimetry in medicine and antisepsis in surgery.

DR. L. BAZET and DR. G. L. FITCH commended the method in so far as it endorsed the use of alkaloids, since such a practice was a step towards insuring both purity and accuracy.

DR. D. A. HODGHEAD said that his greatest objection was the designation as a special method, as it appeared to tie a man down to one line for every case, whereas therapeutics must always be a matter of judgment.

Regular Meeting August 26, 1890.

The President, J. F. MORSE, M. D., in the Chair.

New Members.—O. G. MILLER, M. D., F. H. HARRISON, M. D., and FRANCES I. FOREMAN, M. D., were duly elected members of the Society.

Neuroses of the Stomach.—DR. A. B. ARNOLD read a paper upon this subject in which he referred to the sensory, motor and secretory disturbances of the digestive function, unassociated with known anatomical changes of the stomach. This group includes the forms of dyspepsia that develop in the course of hysteria, neurasthenia and hypochondriasis. In such cases it may be conceived that a molecular or dynamical change affects a certain nerve centre or nerve path that interferes with the normal process of digestion, or that the fault is due to a morbid reflex action starting from an unknown source of irritation. The symptoms include loss of appetite, nausea, acidity, eructation and pain or uneasiness in the epigastrium, frequently associated with mental depression, languor, or lassitude, and it is only the prominence of the gastric symptoms that justifies the appellation of nervous dyspepsia. Psychical influences are well known to play an important part in the prevalence of nervous dyspepsia, and indigestion is frequently the expression of worry, anxiety, disappointment and the like depressing emotions. Hysterical vomiting and hysterical dysphagia are also instances in which the nervous derangement produces symptoms that only close observation will show to be unconnected with organic disease of the alimentary tract. Great embarrassment in recognizing the true cause of dyspepsia is encountered in hypochondriasis. Its character is chiefly betrayed by the patient's exaggeration of trivial symptoms, and the concentration of the attention on vague and indistinct sensations which are solely subjective symptoms. Disturbance of the secretory function of the stomach dependent on abnormal nervous influence, is a subject on which physiological investigation has thrown much light. We are aware that, normally, gastric juice is not secreted until food is introduced into the stomach, but it is perfectly probable that a morbid influence may interfere with the proper elaboration of the gastric secretion. A vitiated gastric fluid must be assumed to occur in those cases of nervous dyspepsia which are marked by intense acidity of the vomited matter, and in like manner the eructations, and sour taste in the mouth must be ascribed to the same condition which permits the decomposition of food and the generation of gases. Probably it is due to the irritating effect of the latter on the mucous membrane of the stomach and esophagus that many dyspeptic patients are troubled with a distressing sensation of burning and soreness in the epigastrium, and behind the lower part of the sternum. Atonic dyspepsia in neurasthenic persons may be merely a symptom of the loss of energy of the general nerve-muscular apparatus, which interferes with the proper churning movement in the act of digestion. The diagnosis of nervous dyspepsia is only permissible on the exclusion of pathological changes of the stomach. In the treatment of the malady, therapeutics has to combat a morbidly impressible condition of the nervous system, hence general treatment against this underlying cause is of the first importance. Good results may therefore be expected from change of occupation and habits, relaxation from mental and physical strain, and the invigorating influence of out-door life. In the form of dyspepsia under consideration it is of questionable necessity to recommend a meagre and over-cautious diet. It is more in uniformity with the natural instinct, which is the best guide in those matters, to let the patient follow his own inclination as regards the sufficiency and kind of food he relishes. What we eat with pleasure enhances the appetite and the power of digestion. The habit of taking a morning dram for exciting the appetite is not to be encouraged, although alcoholic liquors frequently answer this purpose and give relief to epigastric uneasiness. There is one remedy of deserved reputation in nervous dyspepsia for reason of its local effect on the muscular fibres of the stomach, and its general excitant action: Nux-vomica. It is often advantageously prescribed in combination with quinine. Preparations of gentian, cascarilla and columba may be of benefit, and good results are frequently obtained from iron, especially in the form of Blaud's pill. Bismuth has been much lauded for the relief of cardialgia, while codeine appears to be preferable to morphine in epigastric pain, as it does not produce nausea and confine the bowels. It is far from certain that the various peptonizing substances, which have come into use, effect in the stomach changes similar to those which are observed in the process of artificial digestion. It has been ascertained that pepsin is rarely found below the normal proportion in the worst cases of dyspepsia; it is the free hydrochloric acid which is deficient in quantity. In the treatment of nervous dyspepsia some claim may be advanced in favor of electricity The cases in which this therapeutical agent has been employed are yet too few to judge of its efficiency, but a wider experience will probably confirm the alleged beneficial effects of galvanization in improving the weakened functions of the stomach.

Dr. P. H. Bailhache said that while the class of his practice brought him in contact with many cases of indigestion and dyspepsia, most of them were due to organic changes in the stomach; still he had met with several cases of the hysterical variety mentioned by Dr. Arnold, one of which, after a duration of six years, was finally cured by copious rectal enemata of cold water.

Dr. Basil Norris spoke of the value of drinking water freely at meal time so as to dilute the ingested food and thereby facilitate digestion.

Dr. John Wagner believed that nervous dyspepsia was the form least amenable to treatment; travel, change of scene and occupation being the most efficient remedies, as drugs offered very little hope. The drug, most useful in his experience, was morphine in doses of $\frac{1}{30}$ of a grain, which quieted the nervous feeling, restrained hypersecretion of gastric juice and permitted digestion to proceed more naturally. The remedy had to be used with great care, and its character kept secret from the patient.

Dr. H. M. Sherman thought that Dr. Arnold's statement that pepsin was not deficient in cases of nervous dyspepsia was inconsistent with clinical experience, which showed a marked improvement under the use of peptonizing substances.

Dr. Arnold in replying said that he merely quoted experiments which showed that the deficiency was in the quantity of the hydrochloric acid. We could not expect the gastric processes to be carried along with the same precision as in the physiological laboratory where we have complete control. The dyspepsia he referred to was not the bilious attack, but was free from all organic changes and associated with nervous constitutional conditions of which the dyspepsia might be the only symptom.

Sarcoma.—DR. D. W. MONTGOMERY showed a sarcoma which had been removed from the anal region of a young man by Dr. McNutt. The tumor was lobulated and found to consist of large spindle and oval cells arranged in tracts running through the tumor. The outer layer consisted of round cells and would suggest that the round cells were primary and gradually developed into spindle cells. It was a spindle celled sarcoma, and corresponded to the fibro-plastic tumor of the earlier French writers.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

The Use of Antiseptics by Midwives.—Changes in the System of Medical Education in France.

At the commencement of 1890, the Paris Academy of Medicine was asked by the Minister of the Interior to discuss the question of the use of antiseptics by midwives. This body decided that it would be dangerous to sanction the use of every antiseptic by the nurses. The following resolution was therefore passed: That midwives should be authorized to purchase from chemists packets containing 25 cgm. of corrosive sublimate, one gramme of tartaric acid, colored by a few drops of a 1 per cent. carminate of indigo solution. These powders were to be used in a quart of water. As soon as this resolution became widely known, objections were showered upon it. Under these circumstances the Minister of the Interior has not officially sanctioned the resolution, which is therefore at present null and void. The principal objections advanced by the profession against it are, that corrosive sublimate is a powerful poison, and that the solution, when prepared with the powders, might be accidentally drunk, notwithstanding the blue tint of the carminate of indigo. The latter was substituted for the aniline tint of Bordeaux red, suggested by the Secretary of the Commission of Inquiry and objected to by the Academy of Medicine, because the antiseptic solution thus resembled wine. It was also urged that in certain illnesses connected with pregnancy, albuminuria, for instance, corrosive sublimate is dangerous. Every critic proposed a different antiseptic, and in almost every instance the formula was too complicated to be prepared in villages and small towns, or else could only be used by the midwives by carrying with them to the patient's home a collection of bottles obviously impossible for the mass of midwives spread over France, who have sometimes to go miles from their homes to attend their patients. The important question had arrived at this stage, when M. Tarnier, the celebrated professor of gynecology, with the help of M. Vignal, embarked on a series of experiments in order to solve it. M. Vignal, in his laboratory experimental research, studied the bactericide power of a large number of antiseptic substances, choosing those most widely used and most easily prepared in solution, suitable for obstetric practice. The results of these experiments proved that a series of antiseptics hitherto used must be eliminated from the list, inasmuch as they do not kill the pathogenic microbes on which they were tested, *i. e.*, the staphylococcus pyogenes aureus and the streptococcus pyogenes, sufficiently rapidly, the destruction of these microbes with certain antiseptic substances is relatively long. M.M. Tanier and Vignal experimentally tested the efficacy of certain antiseptic substances in the wards of the Lying-in Hospital, by taking a certain quantity of lochia from women treated with different antiseptics, and mixing it with cultivation fluid. Each antiseptic was thus tested under exactly the same conditions in order that a strict comparison could be applied. When this series of experiments was concluded, the investigators ascertained that the only antiseptics to be used for lying-in women, are corrosive sublimate in a solution of 0.25 gms. per 1,000, a solution of iodide of mercury in the same proportion (but this latter salt is difficult to dissolve), sulphate of copper in a 5 per 1,000 solution, carbolic acid in a 2.5 gm. per 1,000 solution, and permanganate of potash solution gm. 0.25:1,000. M.M. Tanier and Vignal especially recommend the copper sulphate solution. It is cheap and can be procured from druggists in the smallest village, is easily carried from place to place in small packets, and is not in the least degree toxic. This has been proved by M. Galippe's researches, and confirmed by other scientists. If too much be absorbed vomiting immediately ensues.

There has been, during the last two or three years, a growing feeling that there should be in France, more large universities and fewer small medical faculties and schools. At the present time this feeling is widely and actively manifested. In order to make this question intelligible to American readers, I must begin by stating that medical instruction in France is furnished by three different kinds of schools. The Medical Faculties of Paris, Bordeaux, Lyon, Nancy and Montpelier, are the only faculties which have the right to confer the title of M. D. on students who have followed their curriculum. Five schools can give a certificate of *Officier de Santé* (Health Officer), who practise as physicians but not as surgeons. Students who intend to take the M. D. degree can pass all their examinations at one of these schools, excepting the two final examinations, which must be passed at one of the above faculties. Last in the list of teaching bodies are the secondary schools; there are about ten of these. Students can study in them until they pass the three first examinations. In order to pass the two remaining they must study two years more in a French Medical Faculty. The medical thesis is then argued and the M. D. diploma attained. The Medical Science Faculty, also those of Law and Arts, are thus spread over France. In some towns there are all three faculties and a medical school as well. There is now a decided movement in favor of the suppression of these small faculties, some of which repose on their laurels, and owe their continued existence to the prestige of past glories. The Montpelier Faculty is a striking example of this. It is argued that these multifarious schools are a waste of good material, which if organized in teaching centres, would give better results. The towns which see their faculties and schools in danger of "being improved from off the face of the earth," make energetic protests, send deputations to the government which end in failure, and lead to the resignation of the Mayor and Municipal Councillors. This took place at Montpelier, and marriages had to be postponed until a new Mayor was installed in office. At present it is impossible to foresee how this dawning educational movement will terminate; whether the small centres will be quickly extinguished or whether they will slowly die out. One thing is certain that the influence Napoleon I exercised on higher education, which was to organize it, like a regiment, and which has hitherto survived, will be wiped out. In close connection with the university question which affects the student, is the one of organizing the teaching bodies. The professors of medical faculties pass a series of competitive examinations, called *concours,* which exact considerable knowledge and oratorical power, rather than positive scientific attainments. The value of *concours* has long been questioned, and now this system is rudely attacked. Huchard, a few days ago, very ably showed its shortcomings and the consequent evils. In a future letter I will describe the remedies suggested.

Paris, September 1, 1890.

REVIEWS AND NOTICES.

A TEXT-BOOK OF PRACTICAL THERAPEUTICS WITH ESPECIAL REFERENCE TO THE APPLICATION OF REMEDIAL MEASURES TO DISEASE AND THEIR EMPLOYMENT UPON A RATIONAL BASIS. By Hobart Amory Hare, B. Sc., M. D., Clinical Professor of Diseases of Children, and Demonstrator of Therapeutics in the University of Pennsylvania, etc., in one octavo volume of 632 pages. Philadelphia: Lea Bros. & Co. Cloth, $3.75; leather, $4.75.

This new candidate for professional favor, bears the date of the current month. It may be expected, therefore, to be up with the times. It is divided into four parts, the first devoted to general therapeutic considerations. At the outset the author enters a strong plea for the value and the study of therapeutics, admonishing the surgeon even that the brilliant advances of his favorite department are strictly dependent on antecedent therapeutic triumphs—notably anesthesia and antisepsis. The second section, devoted to the study of drugs in their alphabetical order, is brief;but as it is chiefly restricted to the consideration of their physiological and their untoward effects,their therapeutics and administration,it presents a large mass of valuable information in convenient form. The third section deals cursory with remedial measures other than drugs, and with foods for the sick, and the fourth with the application of remedies in the treatment of various pathological conditions and diseases. Appended to this are a table of remedies and doses and an index of diseases and their treatment. The latter adds materially to the value and convenience of the work. The newer remedies receive due attention, and with the exception of phenacetine, seem justly appraised. Despite the author's somewhat careless style, the work as a whole, is characterized by clearness, brevity and convenience. It may be warmly recommended to the student and junior practician.

Part I. ESSENTIALS OF REFRACTION AND THE DISEASES OF THE EYE, by Edward Jackson, A. M., M. D., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, etc. Part II. ESSENTIALS OF DISEASES OF THE NOSE AND THROAT, by E. Baldwin Gleason, S. B., M. D., Surgeon in charge of the Nose, Throat and Ear Department of the Northern Dispensary of Philadelphia, etc., with 118 illustrations. Sanders' Question-Compends., No. 14. Philadelphia: W. B. Sanders, pp. viii.—276. Price, $1.00; interleaved for taking notes, $1.25.

This is an unpretentious volume, devoted to short questions and answers on the elementary topics of the Eye, Nose and Throat diseases. The scope of the work indicates that it was prepared for students and for practitioners who have had limited opportunities to familiarize themselves with these subjects, but who may by the force of circumstances be compelled to treat eye and throat diseases. As an elementary work it is thoroughly satisfactory. It is a safe book for the student, as the information is clearly and concisely given, and is convenient for reference. Both the authors are teachers and have acquired the habit of formulating explicit and short answers to the questions propounded.

STRICTURE OF THE RECTUM, by Chas. B. Kelsey, M. D.; INFLUENCE OF HEREDITY ON ALCOHOLISM, by Dr. Paul Sollier; RABIES, by Louis Pasteur; COLOTOMY, by Thos. Bryant, F. R. C. S.; MASSAGE OF THE ABDOMEN, by Dr. Reubens Hirschberg, vol. vii, No. 1; Medical and Surgical Monographs. New York: William Wood & Co. Price, $1.

This volume contains two monographs upon allied subjects which are of much value. "Stricture of the Rectum," by Charles B. Kelsey, M. D., of New York, and "Colotomy, Lumbar and Iliac, with Special Reference to the choice of operation," by Thomas Bryant, F. R. C. S., of London. Dr. Kelsey's work is a valuable contribution upon the practical management of a most troublesome and unpromising class of cases which are too often wholly neglected or are relegated to the hands of quacks and incompetents. It is pleasant to note that there is something of encouragement to offer to this class of sufferers from skilful and well directed efforts in way of treatment. Certainly much advancement has been made in our knowledge of the management of non-malignant cases. The various methods of operative procedure are clearly set forth and illustrated, and appended to the article is a list of ninety-six cases wherein there was a resort to operative treatment. The results as shown by this series of cases is certainly flattering. Considerable space is devoted by the author to a discussion of the choice of operation in colotomy; and it is of interest to note that a decided preference is given to what is called the inguinal as opposed to the lumbar method, which is as strongly upheld by Bryant. The article by Bryant is a candid and logical argument for lumbar colotomy. In maintaining his position he places little reliance upon statistics, which he states with much force are as unreliable as those of herniotomy, while the value of the latter operation is questioned by no one. It is the period at which either operation is undertaken that is of paramount importance. The article on Rabies. by Louis Pasteur, will be read with profit by all interested in the matter of preventive inoculation. The author has written a brief, concise and convincing account of his experiences. It would seem that Pasteur's theory has stood the test of time, and it now becomes imperative that the profession should acquaint itself with every detail of the procedure. Altogether this volume is one of the most valuable of the series.

WEEKLY ABSTRACT OF SANITARY REPORTS. Issued by the Supervising Surgeon-General, M. H. S., under the National Quarantine Act of April 29, 1878, Vol. iv, No. 1 to 52. Washington: Government Printing Office.

This volume presents in bound form the very valuable "Weekly Abstracts," issued by the Marine Hospital Service. A convenient index greatly enhances the value of the book. The abstracts are always interesting and always useful, and their utility has lately been increased by the incorporation of a temperature and a rainfall (U. S.) chart, indicating the actual meteorological conditions, their distribution, and their relation to the normal.

MINERAL SPRINGS AND HEALTH RESORTS OF CALIFORNIA, with a complete chemical analysis of every important mineral water in the world. Illustrated. By Winslow Anderson, M. D., Assistant Chair of Medical Chemistry and Materia Medica and Teacher of Chemistry in the Laboratories of the University of California in the Medical and Dental Departments: San Francisco: The Bancroft Co. p. p. xxx—384. Price, $1.50.

This work, a portion of which was the prize essay of the Medical Society of the State of California, for 1889, is a very complete guide to the various mineral springs and health resorts throughout the State. Dr. Anderson emphasizes the fact, of which the profession are becoming aware, that our springs are quite equal in medicinal value to those of great celebrity in the Old World. Comparative analysis of most of the noted springs are given, and the ingredients are found to be practically similar. The reason why as good effects are not obtained is generally recognized and has been pointed out by the author. Elsewhere, but particularly on the continent of Europe, large sums of money have been invested in the development of the springs, upon which everything centres. Elaborate facilities for bathing in and for drinking the waters, and ample amusements have been provided. Hotel accommodation is of the best. Thoroughly trained and experienced physicians are in attendance; the strictest rules and regimen are observed, and it would even be exceedingly difficult for an obstreperous patient to obtain anything than the diet best suited to him. These facts have been recognized abroad, and have been thoughtfully elaborated by Mr. Ernest Hart, in some articles on Carlsbad, in relation to British mineral springs, that appeared in the *British Medical Journal.* Dr. Anderson assures us that we have in California the same waters so eagerly sought after abroad; we know that we possess an incomparably superior climate and greater natural scenic advantages. All, then, that is needed is a concentration of effort at some of the best springs, and the adoption of those methods that have proved so successful abroad. Dr. Anderson has included in his book a great deal of interesting information pertaining to the subject and an extended historical sketch. The book is an exceedingly useful one, and will, we believe, be appreciated as a convenient source of reference by physicians.

A SYNOPSIS OF MORBID RENAL SECRETIONS, second edition, revised. By Albert Abrams, M. D., Adjunct to the Chair of Clinical Medicine and Demonstrator of Pathology, Cooper Medical College, etc. San Francisco: The Bancroft Company. Price, $1.00.

This synopsis is arranged in chart form, on heavy board, 22x28 inches, the type being clear and distinct and of sufficient size to be readily seen from some distance when hung upon the wall. The general heads are Sugar, Albumin, Bile, Blood, Unorganized Sediments, and Drugs. The sub-heads, in addition to the usual systematic analysis, include "Etiology" and "Therapy," under each of which a short summary is given. The subject matter is clearly arranged and so grouped as to show at a glance the desired information, the best example, perhaps, of which is the column on "Unorganized Sediments." This chart will be found a convenient and valuable addition to the doctor's office.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At the regular meeting of the Board of Examiners, held Sept. 3, 1890, the following physicians were granted certificates to practise medicine and surgery in this State:

Sanya Asano, San Francisco; Imp. Univ. of Japan, Dec. 24, 86.
George D. Brownlee, San Jose; Med. Dept. Tulane Univ. La., March 30, '87.
William Legault, Oakland; Univ. of Victoria Coll., Montreal, Can., '90.
Andrew J. Nabers, Los Angeles; Kentucky School of Med., Ky., June 30, '84.
John U. Raymond, Lakeview, Ore., Med. Dept. Univ. ot Mich., March 24, '75.

CHAS. E. BLAKE, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from August 17, 1890, to September 17, 1890.

First Lieutenant Leonard Wood, Assistant Surgeon, now at Camp at Monterey, Cal., will return to his station, Presidio of San Francisco. Par. 3, S. O. 72, Dept. of California, Aug. 25, 1890.

Leave of absence for one month, to take effect on or about October 20, 1890, is hereby granted First Lieutenant Leonard Wood, Assistant Surgeon, with permission to apply for an extension of one month. Par. 1, S. O. 74, Dept. of California, Aug. 30, 1890.

First Lieutenant Nathan S. Jarvis, Assistant Surgeon, is relieved from duty at Fort Verde, A. T., and will report in person to the commanding officer, San Carlos, A. T., for duty at that station. Par. 2, S. O. 208, A. G. O., Sept. 5, 1890.

Leave of absence for one month is granted Captain Edward C. Carter, Assistant Surgeon. Par 2, S. O. 108, Dept. of the Columbia, Sept. 6, 1890.

Major Joseph K. Corson, Surgeon, is relieved from duty at Fort Sherman, Idaho, and will report in person to the commanding officer, Washington Barracks, District of Columbia, for duty at that station. Par. 4, S. O., A. G. O., Sept. 10, 1890.

Official List of Changes in the Medical Corps U. S. Navy (Pacific Station) from August 20th to September 20th, 1890.

Passed Assistant Surgeon J. E. Gardner, detached from "Albatross" and ordered to his home.

Passed Assistant Surgeon N. H. Drake, from C. S. S. "Hassler" to "Albatross."

Passed Assistant Surgeon T. A. Berryhill, from Naval Hospital, Mare Island, Cal., to C. S. S. "McArthur."

Surgeon Howard Smith, from "Alliance," China Station, to Naval Hospital, Mare Island, Cal., for treatment.

Passed Assistant Surgeon F. W. Olcott, to "Alert," Oct. 8, 1890, at Mare Island, Cal.

REPORTS, ANALYSES, AND NEW INVENTIONS.

Wyeth's Beef Juice.

We have received from John Wyeth & Bro. a sample of a new preparation—"Beef Juice." It is claimed for this article that it contains all the albuminous principles of beef in an active and soluble form, the hemoglobin of the meat unaltered, and that it possesses the nutritive properties of beef to a higher degree than any other extract of meat. The first two claims are certainly supported by simple tests—the third remains to be proved by experience. Beef Juice is a clear liquid, of a dark red color, with very much the odor of strong beef tea, and with a sharp, salt, decidedly meaty taste. Mixed with iced water in the proportions directed, it makes a very agreeable beverage, that is certainly followed by a sense of refreshment and stimulation. On adding it to *luke warm* water, it makes an excellent beef tea. Owing to its constitution, it is, however, best administered in cold water. We are satisfied that the manufacturers have succeeded in producing an article of exceptional value.

ITEMS.

Reed & Carnrick.—We regret to learn that Messrs. Reed & Carnrick, the well known manufacturers of infant foods, have suffered a severe loss in the burning of their factory on September 10th. The interruption to business will, however, be only temporary, as they will soon have the damage repaired.

Barrett Battery Co.—The John A. Barrett Battery Company, of Baltimore, Md., manufacturers of the chloride of silver dry cell, has changed the firm name to that of "The Chloride of Silver Dry Cell Battery Company." The step has been taken in consequence of the similarity of the former name to that of other firms.